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# CARAKA SAṂHITĀ

(A Scientific Synopsis)

By

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and

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# FOREWORD

The present monograph of *Caraka Samhitā* is the first of a series of studies being published by the National Institute of Sciences of India which in 1959 constituted a Board for the compilation of a History of Sciences in India Several bibliographies and monographs are now ready and their publication will be taken up as and when funds become available

The work of the Board has now been taken over by the National Commission for the History of Sciences in India, inaugurated on January 15, 1965, by Shri M C Chagla, the Union Minister of Education

This monograph offers a scientifically classified account of the contents of *Caraka Samhita*, one of the two earliest and most renowned medical treatises of ancient India Of these two treatises, *Caraka Samhitā* and *Suśruta Samhitā*, dealing respectively with medicine and surgery in the main, *Caraka* is admittedly the more ancient, though both have passed through repeated recensions by later and more advanced workers The significance of these treatises lies in the rational basis of their concepts and discourse, and in their adoption of scientific terminology

No definite date acceptable to all, could however be assigned as to the composition of *Caraka Samhita*, though its antiquity is not generally challenged The extant *Caraka* is a redaction by Drdhabala of the genuine *Caraka Samhita*, which was itself a redaction by Caraka of the original work of Agnivesa, a disciple of Ātreya Punarvasu—a teacher in the University of Taxila during the age of Buddha Caraka has been identified by some scholars with a physician of the same name in the court of the Indo Scythian king Kaniska, who reigned in the second century A D From a consideration of internal and external evidence many authorities are of opinion that *Caraka Samhita* is more or less a record or compilation of the deliberations of a congress of medical experts in ancient India held in the early Buddhistic era Hence the progress of scientific knowledge in ancient India, as recorded in the medical treatise of Caraka the most celebrated of the early Indian authors on the subject, may be compared with that of contemporary Greece, as represented by the works of Hippocrates It has therefore, been assumed by some western scholars that the medical knowledge, as expounded by Caraka, betrays some acquaintance with the works of that Greek author, though they have failed to advance any convincing proof

This synoptic survey is well documented and its authors have taken good care of avoiding all attempts at improving upon Caraka's concepts and views in order to give them an air of modernity, which often unfortunately occurs in the case of many modern publications on ancient texts This will help ensuring a proper assessment of the standard of scientific knowledge prevailing in India during the time of Caraka The work will therefore, serve as a record of reliable source materials for the compilation of a history of Indian medicine *A similar survey of the contents of Suśruta Saṁhita is now in progress* Students of medicine and pharmacology particularly those interested in research will find the publication quite useful Moreover, it will contribute in no small measure towards the preparation of scientific terminology in Indian languages so urgently needed at the present moment

The Convener desires to express on behalf of the retiring Board its appreciation of the meticulous care and scholarship with which Prof P Ray with the assistance of Shri Hirendra Nath Gupta, has carried out the task The monograph will be welcomed by a wide circle of interested readers

I do confidently hope that the book will not fail to achieve the purpose it has in view

D M Bose
*Convener*

*February* 4 1965

# PREFACE

In the present work a synoptic survey of the *Caraka Samhita*, a well known medical treatise of ancient India, has been made The concepts, processes, methods, and materials, which occur in the treatise in a scattered manner, interspersed with an abundance of metaphysical disquisitions and with frequent reference to Vedic gods and hymns, have been co ordinated and systematized from a scientific point of view Most of the materials have been arranged in tabular forms for ready reference and rapid survey Wherever necessary, and as far as possible, both English and Latin equivalents of all Sanskrit names and terms have been supplied to avoid ambiguities in their identification

This is possibly the first attempt at rendering in English on a scientific basis the salient features of the views and observations of Caraka in a classified manner in order to make them accessible to all those English speaking scholars, who may not have time and opportunities to go through the original Sanskrit text, or its English translations that are available We would like to acknowledge here the valuable help we have received from these translations

A proper assessment of the standard of scientific knowledge, particularly of medical science, acquired by the ancient Indians at a time prior to Galen, if not even much earlier as upheld by some scholars, is thus likely to be facilitated Students of medicine and pharmacology, interested in research work, are also expected to find this publication particularly useful for their purpose

In preparing this synopsis we have made use of the following editions of the text, and have consulted the available commentaries and translations

1 *Jalpakalpataru*, the complete text of *Caraka Samhita*, edited by Kaviraja Gangadhara with commentary, Vols I III Second Edition, Calcutta, 1880 81

2 *Caraka Samhita*, complete text with Cakrapāṇi's commentary, edited by Harinatha Visarada Calcutta, 1892

3 *Caraka Samhitā*, edited by Shree Gulabkunverba Ayurvedic Society, with introduction, commentary and indices including English, Hindi and Gujarati translations, Vols I-VI Jamnagar, 1949

4 *Caraka Samhita* (*Agnivesa Samhita* as revised by Caraka and Drdhabala), with *Āyurveda Dipikā*, the commentary of Cakrapāni Datta, edited by Vaidya Jādavaji Trikamji Āchārya, third edition Nirnaya Sagar Press, Bombay, 1941

References in the present work to the chapters and verses in the original text follow the numberings given in the two last named publications

For botanical and zoological names the following authoritative works served as the principal source of our information

1 *Flora of British India* by J B Hooker, Vols I VII London, 1872 1897

2 *Pharmacographica Indica* by W Dymock *et al*, Vols I IV London, Bombay, and Calcutta, 1893

3 *Indian Medicinal Plants* by R N Chopra, Patna, 1932

4 *The Fauna of British India* (including Ceylon, and Burma) Taylor and Francis, London, 1949

5 *Sanskrit English Dictionary* by M Monier Williams Oxford, 1951

In spite of all our precautions, we are quite conscious of the possibility of mistakes and errors, still occurring in this synopsis and we shall be thankful to our readers for bringing them to our notice, if they happen to find any

The following abbreviations have been used

*Sū —Sutrasthana, Ni —Nidanasthāna, Vi —Vimanasthana, Śā —Śarirasthana, In —Indriyasthana, Ci —Cikitsasthana, Ka —Kalpasthana, Si —Siddhisthana*

We take this opportunity of expressing our grateful thanks to Pandit N C Vedantatirtha of the Asiatic Society for his kindly going through the final proof and verifying the Sanskrit names and terms Our thanks are also due to Mrs S Mitra, Sub editor, National Institute of Sciences of India, for her *ungrudging assistance in reading the proofs and in seeing the work through the* press We must also express our great appreciation for all facilities we have received from the authorities of the Asiatic Society for working in their library Finally, we wish to acknowledge our thankfulness to Dr D M Bose, Convener, for his keen interest in the work, carried out under the auspices of the National Institute of Siences of India Above all, we consider it our bounden duty to offer our grateful thanks to Dr A C Ukil who, as the President of the N I S I, *took the main initiative in organizing* the scheme for compiling a History of *Sciences in India and, as the first convener of its Board* evinced a great interest in our work with all possible encouragement and help

We would also like to record here our appreciation of the patient co opera tion of Sree Saraswaty Press Ltd, Calcutta, in bringing out this publication

P Ray
H N Gupta

# CONTENTS

## I AUTHORSHIP AND DATE OF COMPOSITION

The *Caraka Samhita* (literally, treatise compiled by Caraka) is a Sanskrit work of great antiquity Though primarily a compendium on "Āyurveda' (science of life), the philosophical concepts and views that form a considerable part of the *Caraka Samhitā*, serving, as it were, as the background of knowledge and practice of medicine in ancient India, must be considered an integral part of the work

It is difficult, if not altogether impossible, to fix an exact date for its composition, or even to identify its author with any certainty The only text available at present is a redaction by Drdhabala of the 9th century A D, who repeatedly mentioned in the body of the text that he merely edited an ancient work of this name, restoring and reconstructing some missing passages In fact, a major portion of the last book of the Samhita, Siddhisthana, was added by him

The text gives a detailed account of how the *Caraka Samhita* was originally composed A conference of sages, meeting somewhere in the Himalayas, with the common object of alleviating human suffering and assuring a long, healthy and satisfying life to all, decided to take all steps to acquire the necessary knowledge for that purpose (*Sū* Chap 1) Later, one of these sages, Ātreya Punarvasu by name, requested six of his disciples to compile his teachings in writing (*Su* Chap 2) The treatise of Agniveśa was considered the best, and the Samhitā of Agnivesa, revised by Caraka at some later date, formed the basis of Drdhabala's edition In fact, the major portion of *Caraka Samhitā* is presented in the form of questions and answers between the disciple Agnivesa and his teacher Ātreya

There is no reason why this account, as far as the sequence of authorship is concerned, should not be accepted as correct Cakrapani Datta (11th century) in his commentary *Āyurvedadipika* on *Caraka Samhita* practically asserted the identity of the latter with the original *Agniveśa Samhita*, of which he seemed to have a full knowledge

A great deal of difficulty is however encountered, when we try to identify Ātreya, Agniveśa, and Caraka with authors of the same names mentioned in Brahmanical, Buddhistic, Chinese and Arabic literatures Some of these names are found to occur as early as the Vedic period (2nd millenium B C) and some as late as the early centuries of the Christian era It had been a common practice in India, for scholars of lesser fame to assume the titles of their more renowned predecessors in their particular fields with a view to fixing a stamp of authority on their own works This fact introduces an element of un certainty in any tentative chronology

Most of the hymns of the fifth Mandala of the *Rgveda* are attributed to Atri or to Ātreya Again, Ātreya is the name of a famous medical teacher at Taxila, who, according to many Buddhistic and Chinese texts, was the preceptor of Jivaka, the personal physician of Gautama Buddha (6th century B C) But the Ātreya of *Caraka Samhitā* is Ātreya Punarvasu, son of Candrabhāga (*Sū* **13**, 99), whereas no Vedic text, Buddhistic source or Chinese work even mentions the title Punarvasu, or the parentage The *Caraka Samhita* itself makes a mention of yet another Ātreya (*Su* **I**, 9) Nowhere does it mention Taxila as Ātreya s place of residence On the contrary, Punarvasu Ātreya is described as taking a walk in Kāmpilya, a city on the river Ganges (*Vi* **3**, 3) Though the possibility of an excursion, or of migration, cannot be ruled out, there is nothing to support his identity with the teacher of Jivaka, except the surname Ātreya, which is derived from the name Atri and means a descendant or follower of Atri The identification of the author of *Caraka Samhita* with the teacher at Taxila, made by Rudolf Hoernle (*Bower Manuscript* Introduction, p lviii), is not based therefore on any convincing evidence

As for Agnivesa, the *Mahabharata* refers to one Agnivesa as receiving the knowledge of *dhanurvidya* (science of archery) from Bharadvaja (Ādiparva, slokas 5107 and 5108), whereas in the *Caraka Samhita* Agnivesa is merely a disciple of Ātreya, who in his turn received his knowledge of Āyurveda also from one Bharadvaja (*Su* Chap 1) Here again an identification would be hazardous

The Chinese text of *Tripitaka* names one Tehe lo kia (i e, Caraka in Sanskrit) as a trusted physician in the court of the king Kaniska (c 200 A D) *in the north west of India* This Caraka has been identified by Sylvain Levi (Notes sur les Indo Scythes in *J A* 1896, pp 451 480) and by Hoernle (*Studies in the Medicine of Ancient India* Part I, p 9) with the author of the *Caraka Samhita* Here again, the identification is far from convincing, for, the name and title of Caraka (literally, a wanderer) has been found in many places and contexts in ancient Indian literature and is, in fact, associated with a particular school of medical knowledge Reference to this is found in the *Black Yajurveda* (L Renou, *Écoles Védique*, p 129, 144, etc) The *Taittiriya Samhitā*, known to *be a work dating from more than a thousand years before the Christian era,* also speaks about the Caraka School of medicine, though not in complimentary terms (*Taittiriya Samhita*, VI, 4, 9) It is more than possible that all subsequent Carakas, including the court physician of Kaniska were later exponents of this medical school, and centuries might have elapsed between any two *holders of this name or title*

From passages in Cakrapani Datta s *Āyurvedadipika* and in Sivadasa Sena s commentary on the latter work (12th century A D), it appears that Patanjali, the famous grammarian (c 2nd century B C) and a great alchemist, also revised *Caraka Samhita* If these are to be believed Caraka cannot by any

stretch of imagination be placed in the court of Kaniska three or four centuries later

It is therefore extremely difficult to give any definite date when Ātreya, Agnivesa or Caraka of our text might have flourished

P C Rây (*History of Hindu Chemistry*, Vol I, Introduction, pp xiii—xxiii) after considering all internal and relevant evidence places the date of composition of *Caraka Samhitā* in the pre-Buddhistic period, i e, before 600 B C His arguments are summarized below

1 The text of Caraka is written in a haphazard and unsystematic style, intermingled with metaphysical disquisitions in sharp contrast with the precise style of works composed in the Buddhistic and later periods

2 Vedic gods and *mantras* occur repeatedly, but references to Paurānic mythology and Buddhistic scriptures are conspicuous by their absence

3 Caraka follows Vedic texts in counting the number of bones (360) in the human body, and in assuming the age of thirty as the limit of man's youth

4 The prose style of Caraka resembles that of the Brahmanas of the Vedas

5 The treatise appears to be a record of the deliberations of Vedic *ṛṣis*, often giving their discussions in full (vide discourse on tastes, *Su* Chap 26) and clearly mentions that it was composed shortly after those deliberations

6 Patañjali (2nd century B C ) is known to have made a redaction of the *Caraka Samhita*

Jean Filliozat (*La Doctrine classique de la Médicine Indienne*, pp 17-19) also believes that significant references found in the text, the stage of development of the language employed, and careful comparison with other works of established dates, can give a more reliable idea of the date of composition than the names and dates of supposed authors He, however, considers the style and composition definitely post Vedic and having considerable affinity with the *Arthaśāstra* of Kauṭilya (3rd century B C ) According to him, the *Caraka Samhitā* was composed in a period which antedates the Christian era, but not by a very long period He gives the 2nd or 1st century B C as the most probable date

Some workers (Filliozat, *loc cit*, and Gananath Sen, *Pratyaksa Sāriram* Vol I, 8 11) have identified Caraka with Patañjali, but the evidence in support of this view is not very convincing

Winternitz (*History of Indian Literature*, part I) assigns 100 A D as the approximate date of *Caraka Samhita*, and the Chronology Committee of the National Institute of Sciences of India (*Proceedings*, 1952) after considering all available evidence adopted this date for the text, which formed the basis of Dṛḍhabala's redaction

## II. SCOPE AND SUB-DIVISIONS OF THE TREATISE

*Caraka Samhitā* is primarily an exposition of Āyurveda, the science of life, defined as the science of the causes and symptoms of diseases, of their medication, and of the maintenance of health (*Sū.* **1**, 23). It also deals with the origin of medical science, the fundamental causes of conception and birth, and of physical deformities. According to Caraka, life is everlasting and without any beginning. Āyurveda, the science of life, has also been always in existence (*Sū.* **30**, 27).

The treatise contains a detailed classification and nomenclature of diseases—their etiology, diagnosis, prognosis and treatment. Embryology, obstetrics, anatomy, physiology, personal hygiene, sanitation, training and duties of physicians, and other theoretical and practical aspects of medicine are also treated in some detail. Interspersed in the text are passages which give valuable indications of the cosmological, biological, physicochemical, metaphysical, ethical and philosophical ideas prevalent in India at the time.

According to Caraka, Āyurveda has got eight branches (*Sū.* **30**, *30*) :

(1) *Kāyacikitsā*, therapeutics.

(2) *Śalakya*, the science of the special diseases of the eye, ear, nose, mouth, throat, etc.

(3) *Śalyāpahartṛka*, surgery.

(4) *Viṣagaravairodhikapraśamana*, toxicology.

(5) *Bhūtavidyā*, psychiatric knowledge.

(6) *Kaumārabhṛtya*, pediatrics.

(7) *Rasāyana*, rejuvenation.

(8) *Vājikarana*, knowledge for increasing virility.

The *Caraka Samhitā* is an exhaustive compendium on therapeutic medicine and claims to contain all that is to be known in this branch (*Si.* **12**, 53), though it contains sections devoted to the other seven branches.

The scope of the treatise is stated to be limited to ten specific topics (*Sū.* **30**, 32):

(*i*) *Śarīra*, anatomy.

(*ii*) *Vṛtti*, physiology.

(*iii*) *Hetu*, etiology.

(*iv*) *Vyādhi*, pathology.

(*v*) *Karma*, treatment.

(*vi*) *Kārya*, objectives.

(*vii*) *Kāla*, the influence of age and seasons.

(*viii*) *Kartṛ*, physicians.

(*ix*) *Karana*, medicines and appliances.

(*x*) *Vidhiviniścaya*, procedure and sequence.

For a discussion of the above topics the treatise is divided into eight sections (*Sū* 30, 35)

(1) *Sutrasthāna* deals with general principles, philosophy, etc
(2) *Nidanasthana* deals with causes of diseases
(3) *Vimanasthāna* deals with taste, nourishment, general pathology, etc
(4) *Śarirasthāna* deals with anatomy and embryology
(5) *Indriyasthāna* deals with diagnosis and prognosis
(6) *Cikitsasthāna* deals with treatment of diseases
(7) *Kalpasthāna* deals with pharmacy
(8) *Siddhisthana* deals with cure of diseases

In all, there are one hundred and fifty chapters on specific topics There are at places some later revisions or interpolations, as repeatedly admitted by the redactor at the end of each and every chapter In fact, Drdhabala states that he had to rewrite and complete the last section *Siddhisthāna* from the materials available to him (*Si* 12, 55) The twelfth or last chapter of this section was not available at all and had to be restored by him in order to complete the treatise (*Si* 12, last *śloka*)

## III CONCEPTS AND THEORIES

(*a*) Man and Matter Aim of Medical Science

Man, according to Caraka, is an epitome of the macrocosm (*Śā* 5, 3) Following the philosophical doctrines of Sāmkhya and Vedānta, Caraka holds (*Śā* Chap 5) that the individual is a replica of the universal, both the external world and the individual man are the manifestations of one and the same eternal spirit (*Brahman*) In other words, spirit and matter are not two separate entities but one integral whole Both man and the visible world are composed of six elements *Pṛthvī* (earth), *ap* (water or liquid), *tejas* (fire), *vayu* (air) and *akaśa* (ether) are common to both The sixth element, the spirit or self in the individual, is equivalent to *Brahman* in the universe (*Śa* 5, 4) *Pṛthvi* confers hardness, *ap* confers fluid constituents, *tejas* the body heat, *vayu* the vital breath, *akaśa* the bodily orifices and *Brahman* the spirit (*Śa* 5, 5) Similar to the office of the creator in the universe is the might of the individual soul in man He also creates life by the act of impregnation (*Śā* 5, 6) Like the diverse things present in the universe, the different entities comprising the human being are too numerous to count (*Śa* 5 4) There is in man as much diversity as in the world outside (*Śā* 5, 3)

The human body is made up of innumerable minute parts which, because of their extreme fineness, are invisible and not amenable to sense perception These may be compared to the cells of the body, as we now understand (*Śa* 7, 17)

According to Caraka there are four criteria of truth (*a*) authoritative

testimony (*b*) direct observation, (*c*) logical assumption (*d*) inference Any thing contrary to reason is to be rejected as untruth, (*Su* **11** 17, 26 28) To this might also be added (*e*) tradition and (*f*) analogy (*Ii* **8** 33)

The realization of truth or perfect knowledge by man arises from the sense of equality, i e , from the perception of his own self as identified with everything else in the universe (*Śa* **5**, 7) or from the perception of the unity of the whole world (*Śa* **5** 8) The purpose of life is the attainment of liberation, or emancipation of the soul, which consists in the understanding and realization of truth, leading to eternal peace This cannot be achieved merely by rituals, ceremonial practices keeping up the sacred fire, invocations mendicancy, austerities, asceticism, etc (*Śa* **5**, 10)

A sound mind and a sound body were regarded as prerequisites for the beatific experience of the Divine or *Brahman* in man The aim and object of the study and pursuit of medical science with this end in view was thus defined in the *Caraka Samhita* (*Śa* **5**, 10) For, it serves as an aid to the fulfilment of fourfold purposes of life, namely, *dharma* (performance of duties), *artha* (acquisition of wealth), *kama* (satisfaction of desires), and *moksa* (salvation or self realization) (*Su* **1**, 15 16)

Life, according to Caraka, can be divided into four types *sukhamayuh* (happy life) is a life not affected by physical or mental diseases *asukhamayuh* (unhappy life) is the opposite of this, *hitamayuh* (good life) is a virtuous life devoted to the service and welfare of others, *ahitamayuh* (bad life) is the opposite of this The object of the science of life is to provide information about what tends to develop all these four kinds of life and to determine their span (*Su* **30** 23 24)

All matter is composed of the five *mahabhutas* (gross elements) *akaśa* (vacuum or ether), *vayu* (gas or air), *tejas* (radiant energy) *ap* (liquid or water) and *prthvī* (solid or earth substance) (*Śa* **1**, 27) The gross *bhutas* show five subtile characteristics non resistance motion, heat, fluidity and hardness *Ākaśa* has the sole quality of non resistance In each succeeding element there is found the preceding element or elements with their characteristic properties, as well as its own specific quality (*Śa* **1**, 27 29)

Living things are composed of the *mahabhūtas* and three other constituents *avyakta* (*atman* or unmanifest self), *buddhi* (intelligence) and *ahamkara* (ego) Thus they have the eight fold *prakrti* (*natural characteristics*) (*Śa* **1** 63) The ego is made up of action the consequences of action reincarnation and memory, and is independent of the physical body It can exist without the latter (*Śa* **1** 52)

The five *mahabhūtas* together with the spirit, mind time and space, constitute the totality of all substances (*Sū* **1**, 48) They are perceptible to the senses or to the mind (*Sū* **1**, 62) But they cannot exist singly or without purpose, being ephemeral by nature they cannot escape destruction (*Śā* **1**, 58)

Of the substances, those which possess sense organs are called animate, and those which do not are called inanimate The *gunas* represent the sense properties of colour, taste, smell, touch, and hearing, besides the mechanical and other properties which all elements have in common (*Su* **1**, 48 50)

All senses are mere variations of the five *mahābhūtas*, but each sense partakes of one *mahabhūta* in a preponderating degree and possesses a special capacity for grasping that particular *mahabhūta* (*Sū* **8**, 14)

Conscious perception arises from the fusion of the *atman*, mind, senses and sense objects (*Śa* **1**, 34) This fusion cannot be achieved by accident, an agent is necessary (*Śa* **1**, 44) The ultimate source of consciousness and knowledge is the *Purusa* or transcendent self (*Śā* **1**, 41) The *Purusa* has no beginning in time it is not manifest to the senses, cannot be realized except by inference and does not come under any known category (*Śa* **1**, 60 and 62) It is everlasting, all pervading and changeless (*Śa* **1**, 61) Had there been no *Purusa* there would have been neither good nor evil, no knowledge, no doer and no knower (*Śa* **1**, 39) All these would be causeless Neither could there be any awareness of these, nor would they serve any purpose by their existence (*Śa* **1**, 42) There would have been no dissolution nor creation, no birth nor death, no continuity of life, no consciousness nor perception, no pleasure nor pain, no dynamic nor static condition, no science nor scripture, no bondage nor liberation, if there were no *Purusa* (*Śā* **1**, 38-41)

Caraka holds that life results from the combination of the body, the senses, the mind and the self (*atman*) and that it rests on the body, the mind and the self, as on a tripod If therefore, any of these supports be missing, life ceases to exist (*Su* **1**, 42, 46) As already stated, transcendent self (*parah atmā*) is different from manifest self which participates in the union of the body, mind and the senses (*Su* **1**, 41, 45, 47, 55 56)

(*b*) CONCEPTION AND BIRTH

There are four different origins of living beings womb egg, sweat, and the seed Each of these classes shows countless varieties The viviparous and oviparous embryos assume the shape of such wombs as they find themselves in, though they originate from a complex of causative factors (*Śa* **3**, 16)

Conception occurs inside the womb by the union of semen, ovum and the spirit (*Sa* **4** 5) By the physical act of mating union takes place between the semen (sperm cell) and the female ovum (germ cell), then the spirit, associated with the mind, descends and enters into the zygote formed, and a new embryonic life is created (*Śa* **3**, 2) If the spirit does not descend, no life is created and conception fails to occur (*Śa* **3**, 11) The conscious spirit gravitates to the needed ingredients it creates its own body by gathering the elements together—first the *ākaśa* (ether) alone, then in due order the other *bhūtas* The process is completed in an infinitely small fraction of time (*Śa* **4**, 8)

The conception of all living beings originates from the combined contribution of the mother, the father, the spirit, the essence of the elemental properties and nourishment (*Śā.* 3, 3). It is the mind which yokes the living organism to the spirit and holds the senses together. With the departure of the mind, the organism becomes a lifeless matter (*Śā.* 3, 13).

The spirit in the embryo is the embodied soul. The soul is eternal, diseaseless, decayless, ageless, deathless, indivisible, indestructible, immovable, omniform, omnifunctional, immutable, invisible and infinite (*Śā.* 3, 8).

Hence, there is no birth in the true sense. What we call birth is the mere transition of the already existing sperm, ovum and spirit to the new status of embryo after their union (*Śā.* 3, 8). The spirit is the eternal self and passes through a succession of forms, having no beginning. Life and the spirit, both are without beginning and neither is antecedent to the other (*Śā.* 1, 82).

(*c*) Heredity and Embryonic Growth

Caraka assumes that the sperm-cell (*bīja*) of the male parent contains minute elements derived from each of his organs and tissues (*Śā.* 4, 7). A rational explanation is attempted of the fact that offsprings do not necessarily reproduce every feature of the father, and even a particular womb does not produce identical features in every embryo conceived in it.

A human womb invariably produces a human child in the manner of a wax-mould (*Śā.* 3, 16), but children differ in many important respects from their parents (*Śā.* 3, 17). They may be males or females, twins, multiplets (*Śā.* 2, 11), possessed of sexual abnormalities (*Śā.* 2, 31) and may have individual characteristics and deformities (*Śā.* 2, 28-29).

When the sperm (*śukra*) is dominant, a male foetus is formed, but a female is produced when the female germ (*śonita*) predominates (*Śā.* 2, 12). If the united sperm-ovum gets divided into two or more fragments, a corresponding number of new lives are created (*Śā.* 2, 14). In this case a male is formed from a fragment rich in sperm and female from one rich in ovum (*Śā.* 2, 13). Non-identical twins or multiplets result from unequal fragments (*Śā.* 2, 16). Indeterminate sex and abnormalities occur when neither the sperm nor the ovum predominates, or when they are diseased and weak (*Śā.* 2, 18-21).

Caraka also attempts to explain why congenital deformities of the parents, or constitutional diseases contracted by them in later life, are not necessarily inherited. According to Ātreya's view given in the text (*Śā.* 3, 15), the parental *bīja* (seed or germ-plasm) contains the whole parental organism in a potential or miniature form but is independent of the parents' developed organs, and is not necessarily affected by their idiosyncrasies or deformities. It is the combination and characters of the constituent elements of the parental *bīja*, which is an organic entity independent of the developed parental body and its organs, that determine the physiological features and predispositions

of the embryo Congenital defects like blindness, deafness, dumbness, stammering, lameness, deformity of the spinal column or the bony framework, as well as constitutional diseases like madness, leprosy or chronic skin diseases in the parent, do not necessarily produce corresponding deformities or infirmities in the offspring Only *when an element in the parental bija, representing* a particular organ or tissue accidentally (*daiva*) happens to be defective, undeveloped, or abnormal, the corresponding organ or tissue of the offspring will be similarly affected Again when constitutional diseases, acquired in later life, are found to be inherited, it is supposed that the *bija* has been *infected or affected in that particular instance* Leprosy, for example, is transmitted to the offspring only when *the germ-plasm is actually infected* with the disease by reason of the leprosy of the parent (*Śa* **3**, 15) This mutual interaction of the germ plasm and the somatic tissues seems to be a distinctive feature of Ātreya's hypothesis The continued identity of the germ plasm from generation to generation, affected by somatic processes only by accident or *infection, follows logically from this hypothesis*

Hence offsprings differ from their parents in those tissues and organs whose original representatives in the germ-plasm have been affected by causative factors The sex, stature and complexion of the offspring is also stated to be affected by the influence of abundant or defective nutrition and by the *constituents of foods taken by the parents (Śā* **3**, *5)*

The elements that contribute to the general features of the new born child are (1) the mother's blood, (2) the father's semen, and (3) the *karma* of the individual Its mental traits are determined by the state of the mind of the individual in its previous birth, and will be impure and dull if it was an *animal in the previous birth* (*Śā* **2**, 27)

The embryo inherits its skin, blood, flesh, fat, heart, liver, lungs, spleen, kidneys, stomach, intestines, etc from its mother (*Śa* **3**, 6), its bones, teeth, veins, tendons, ligaments, arteries, semen, hair and nails from its father (*Śa* **3**, 7), its mind, senses, consciousness, ego, memory and life span from the spirit (*Śā* **3**, 10), its *clarity of senses, quality of voice, appetite and vitality* from parental concordance (*Śa* **3**, 11), its visible shape, vigour, sense of contentment and energy from nourishment (*Śa* **3**, 12)

The embryo is a shapeless jelly (*khetabhūta*) in the first month (*Śa* **4**, 9) and a tumour-like or fleshy shape in the second By this time *there is the first indication of the future sex of the embryo* (*Śā* **4**, 10) In the third month the limbs and sense organs are no longer latent but emerge as separate entities (*Śā* **4**, 11) In the fourth month, the foetus is stabilized and the mother puts on weight (*Śā* **4**, 20) It grows in flesh and blood in the fifth month and in strength and colour in the sixth, *at the expense of the mother who becomes* emaciated, weak and pale (*Śā* **4**, 21-22) In the seventh month there is an all-round development and in the eighth there is a continuous flow of

vitality to and from the mother (*Śā* 4, 23 24) It continues to grow by nourishment until delivery, which should occur in the ninth or tenth month (*Śā* 4, 25) Any factor which upsets the proper sequence leads to an abnormal period of gestation, or destruction of the foetus (*Śā* 4, 59)

The first stage of foetal development has been assumed differently by different experts in the discourse given in the *Caraka Samhita* (*Sā* 6, 21)

The child in the womb has its limbs folded, its head erect and its back towards the mother's abdomen (*Śā* 6, 22) Its heart is connected with the mother's heart through the umbilical cord and the placenta, the latter is flooded with blood by the pulsating arteries of the mother The mother's blood transmits nourishment, vitality, and complexion The skin pores of the foetus also absorb the nourishment (*Śa* 6, 23) The two minds (of the mother and the foetus) have an intimate psychical connection (*Sa* 4, 15/2) The foetus may be destroyed, deformed or may suffer psychic injuries due to physical and emotional disturbance of the mother (*Śa* 4, 15-30) Faulty diet and habits, as well as mental shocks, a comprehensive list of which is given in the text, also contribute to this end (*Śā* 8, 21)

Instructions are also given by Caraka for the proper care of the pregnant woman, these include specified diet, prophylactic treatment and maintenance of emotional harmony (*Śa* 8, 32/1) Such treatments ensure good health, vitality and a pliable womb for the mother, and a soft placenta at the time of delivery (*Śā* 8, 32)

The text describes in some detail the symptoms of recent and advanced pregnancy (*Śa* 2, 22, 4, 16), and the pre indications of male and female births (*Śā* 2, 24 25) Methods of ensuring the birth of male offspring (*Śā* 8, 11-19) are also indicated

The signs of imminent delivery (*Śa* 8, 36), the requirements of an well appointed maternity house (*Śa* 8, 33 35), methods of minimizing labour pains (*Śa* 8, 38-39), proper handling and help in delivery (*Śā* 8, 40-41), and post-natal care of the child (*Śa* 8, 42-45) and its mother (*Śa* 8, 48-49) are also described in detail

(*d*) HUMORAL THEORY (CONCEPT OF THE ORIGIN OF DISEASES)

The well known humoral theory, which postulates the existence of three humors in the human body—named *vāyu* (or *vata*), *pitta* and *kapha*, is built upon the premise that apart from a few exceptions all human beings have a predominance of one of the three humors from the very moment of conception (*Sā* 7, 39) The few exceptions are equipoised, enjoying perfect health, the rest can be classified according to the continual predominance of a particular humor in their system The inherent imbalance makes them always susceptible to diseases (*Sā* 7, 40) The types can be diagnosed by their physical characteristics (*Vi* 8, 96-99) But diseases actually occur when

(*e*) *Vāyu* and Its Role in Human System and in Nature (*Sū.* 12, 8)

According to Caraka *vāyu* is that which keeps the machine of the body at work. It is the impelling force for all bodily efforts, and sets in motion the sense organs and the mind; it regulates the body elements, maintains equilibrium in the body, stimulates digestion, eliminates harmful matter and waste products, and gives shape to the foetus. It manifests itself in five forms: *prāna, udāna, samāna, vyāna,* and *apāna*. Their seats in different parts of the body and their physiological effects are also specified (*Ci.* 28, 4-9).

When activated in an abnormal state *vāyu* may create diseases of the body, cause mental depression, affect the sense organs, destroy or deform the foetus, or increase the period of gestation.

In nature *vāyu* serves as an envelope for the earth, supports combustion, causes the formation of clouds, the condensation and precipitation of water as rain, and gives rise to streams. It helps growth of plants, flowers, fruits and crops, and maintains the division of seasons.

*Vāyu* in an abnormal state in nature is identified with storms and winds, causing damage to matter and life.

The properties of *vāyu* has been described by Caraka as dry (*rukṣa*), cold (*śita*), light (*laghu*), subtle (*sūksma*), moving (*cala*), scattering everything in different directions (*viśada*) and rough (*khara*). *Vāyu* has been identified with the continuity of life (*Sū.* 1, 59; 12, 8).

(*f*) Memory and Dream

Caraka has enumerated eight causes of memory (*Śā.* 1, 148-149):

(*a*) Impressions, similar and dissimilar; (*b*) co-ordination of mind; (*c*) practice; (*d*) knowledge; (*e*) recollection; (*f, g,* & *h*) repetition of sight, hearing, and perception

Dreams have been classified by Caraka into seven types, based on (*In.* 5, 27-46):

(*a*) Visual impression; (*b*) auditory impression; (*c*) experience; (*d*) inner desires; (*e*) fancy; (*f*) premonition; (*g*) morbid humors.

An account of the different varieties of dreams arising from morbid humors has been given, particularly those foreboding death.

(*g*) Ethics in Caraka

Caraka advances a very catholic and commonsense view of *karma* and rebirth differing from those of other Indian philosophers. The laws of *karma* are not considered immutable by Caraka who allows a limited amount of freedom to human efforts in arresting the fruits of all ordinary non-moral actions. Only the effects of very good or bad moral actions cannot be thus modified or averted by human efforts. The fruits of all non-moral or ordinary actions can be averted by the exercise of human intelligence,

wisdom and well balanced conduct, and by the administration of proper medicine and the like Caraka therefore holds that right conduct (*sadvrtta*) can help in the *preservation of physical and mental health and in securing sense* control (*indriyavijaya*) (*Vi* **3**, 28 38, *Su* **8** 17)

Caraka recognizes that there are three primary desires serving as the springs or causes of all our actions These are desire for self preservation (*pranaisana*), *desire for wealth* (*dhanaisana*), *and a desire for a happy future* life (*paralokaisana*) (*Su* **11**, 3, 7, 8, 13)

## IV PHYSIOLOGICAL PROCESSES

(*a*) DIGESTION AND METABOLISM

Production of heat in the body is said to be the basis of life process The life span, vital breath, vital essence body heat, muscular strength, energy, lustre, etc , all are dependent upon the production of heat inside the organism *When the body heat becomes abnormal, disease results, when it is suppressed* or dies out, there is an end of life (*Ci* **15** 3 4) In the *Caraka Samhita* the word *agni* has been used for body heat its literal meaning is fire This is related closely to metabolic processes (*Vi* **6** 12)

This production of body heat depends upon the intake of food Food nourishes the body elements, vital essence, strength, etc., but the nutrient action of food is a result of gastric digestion If the process of digestion is hampered, food fails to nourish (*Ci* **15** 5)

Ingested food and drink pass into the stomach and are broken up and *softened by the digestive fluid in the stomach* During this process, the food is transformed into a sweet, frothy mucus like fluid As the digestive process continues it becomes acidic and, issuing out of the stomach, excites the secretion of thin bile (*Ci* **15**, 8 10) Ultimately it is converted into assimilable nutri*tive fluid and also some waste products* Excretions of the body are formed from the waste products (*Su* **28**, 4/7) The process of digestion ends in the large intestines where the remnants are converted into lumps of stool (*Ci* **15**, 11)

*The nutritive fluid formed is converted* into blood, flesh, fat, bone marrow, semen, ligaments and clear fluid (serum ?), as well as the sensory faculties (*Su* **28**, 4/2) The body elements are replenished by the food and are able to maintain the body in a proper condition by gathering the necessary ingredients from food *This replenishment* and maintenance take place when the various metabolic processes are proceeding without interruption, and the *srotamsi* (movements of body fluids) are unimpeded in their proper channels The nutritive fluid then pervades the whole body (*Su* **28**, 3)

The body channels, *constituting* the means of passage of the nutritive fluids from food, feed the various body elements in the requisite measure

and with the required constituents (*Su* 28, 5/1) The requirements of the body according to size, condition and age determine the quantity of nutritive fluid formed from food, thus maintaining the balance of the body elements (*Sū* 28, 4/3 and 4/4)

From the waste products of digestion are formed sweat, urine and stools, the morbid forms of the three body humors, the excretions of the eyes, ears, nose, mouth, hair follicles and female parts, the hairs of the head, face and body, and the nails The quantities produced depend on the age, size and condition of the body (*Sū* 28, 4/1 and 4/4)

(*b*) MOVEMENT OF FLUIDS THROUGH CHANNELS OF THE HUMAN BODY

Caraka states that there are innumerable *srotāmsi* or fluid currents through numerous channels in the human body They serve to convey nutrients and healing matters where needed, and to carry away decaying and harmful products formed These *srotas* convey the products of the body elements—blood, flesh, fat, bone, marrow, nutritional juices, semen and life breath These body elements cannot develop or decay independently of the *srotas* (*Vi* 5, 4)

There is as much functional diversity of these channel systems as in the structural composition of the rest of the human body, but the most important among them are those which carry life breath, water, food, nutritive juices, blood, flesh, fat, bone matter, marrow, semen, urine, stool and sweat The three humors—*vata*, *pitta* and *kapha*—diffuse throughout the entire body with the help of all these channel systems The supersensory essences of man are independent of the channels, the entire sentient body is, in fact, both the vehicle and the field of their operation (*Vi* 5, 3 and 6)

The channels are normally in the form of elongated vessels, extensive ducts or convoluted tubes In dimension, they vary from large to very fine ones (*Vi* 5, 25) The various types found in the body are (*a*) *sira* or vein, (*b*) *dhamani* or artery, (*c*) *rasayanya* or ducts, (*d*) *nadi* or tube, (*e*) *pantha* or tract, (*f*) *mārga* or passage, (*g*) *sarīracchidra* or body orifice, (*h*) *samvrtāsamvrta* (vessel open at one end only), (*i*) *sthana* or container, (*j*) *aśaya* or bladder, (*k*) *niketa* or closed container Some of the channel systems are not visible to the naked eye (*Vi* 5, 9)

The *srotāmsi* have specified centres and areas of operation Such areas develop characteristic symptoms, if any of the *srotas* systems is vitiated or obstructed (*Vi* 5, 6) This obstruction is not limited to the stationary and mobile body channels of the specified area, but may spread to the other *srotas* systems If, however, any one of the three humors is affected, the entire body is also affected (*Vi* 5, 9)

In the heart are rooted the ten main channels that carry the vital essence through the whole length and breadth of the body These main channels

are either *dhamanis* which pulsate, or *srotamsi* which carry nutritive fluids or *sira* (*Su* 30, 8 and 12) Heart is regarded as the only seat of consciousness (*Śa* 7, 8 9), while *prana* (the vital current) and all the senses emanate from the head (*Si* 9, 4)

The heart is the source of the life breath *srotas*, the bronchial area is the source of the water *srotas*, the region of the stomach, particularly the left side, is the source of the food *srotas*, the heart with its ten main channels is the source of the *srotas* of nutrition, the liver and spleen are the source of the blood *srotas*, the muscles and skin are the source of the flesh *srotas*, the kidneys and the omentum are the source of the fat *srotas*, the body fat is the source of the bone matter *srotas*, the bones and joints of the marrow *srotas*, the testes and phallus, of the semen *srotas*, the kidneys and the bladder of the urine *srotas*, the colon and the rectum, of the stool *srotas* and the fat and hair follicles, of the sweat *srotas* (*Vi* 5, 8)

When the *srotamsi* are in an abnormal state there is an increased or decreased flow of the fluids they carry the channels also become knotted and there is diversion of flow to abnormal channels The treatment of such conditions consists of treating the various parts of the body which have been recognized as the specific centres of the various *srotamsi* (*Vi* 5, 24, 26 28)

(*c*) TASTES

The taste is an intrinsic property of material substances There are only six basic tastes—sweet acid saline pungent, bitter and astringent (*Su* 26, 9) These six categories of taste according to Caraka, emerge in different substances from the collocation in unequal proportions (preponderance or paucity) of the five *mahabhutas* or primal elements The same view is held regarding the origin of colour (*Su* 26 40/2)

The sensation, which is immediately perceived on contact of the substance proper with the tongue, is called taste Any sensation subsequent thereto is called the after taste or latent taste The physiological action of all substances depends upon the taste and also its after taste, if any (*Su* 26 28 43)

All tastes are conveyed through the medium of water which according to Caraka, sustains all animal and plant life (*Su* 26, 30) But water has a taste which is imperceptible Palatability, or otherwise, of a substance is a matter of personal idiosyncracy while its beneficial or harmful action depends on factors, like its composition purity and the time and clime of its use (*Su* 26 9)

Single or pure tastes are to be found in many substances, but they occur mostly in combinations For example, alkaline substances possess a complex taste, with saline and pungent tastes predominating By the presence of two three, four, five or all six tastes in the same substance, fifty seven mixed tastes may arise, which with the six simple tastes make sixty three different tastes (*Su* 26, 9 and 24)

In common with the bodily humors, tastes have the inherent properties of heaviness, lightness, coldness, heat, oiliness and dryness. (*Sū.* 26, 9). A knowledge of the tastes of different substances is therefore essential in the treatment of diseases which are caused by the abnormalities of the body humors (*Sū.* 26, 27). In fact, each and every substance, due to the inherent property of taste, may be put to medicinal use, with due consideration to the appropriate time of its application, its quantity, purity, combination with other substances, physical properties and dosage (*Sū.* 26, 12, 29).

The text describes in detail the beneficial physiological actions of the substances belonging to the basic taste groups, and the pathological symptoms produced by their exclusive indulgence or over-indulgence. Thus, with the taste as guide, all edible and medicinal substances, taken in the right measure and manner, are invariably beneficial (*Sū.* 26, 43-44).

## V. HEALTH AND LONGEVITY

### (*a*) Personal Hygiene

Caraka enjoins constant vigilance and a regular daily and seasonal routine of prophylactic measures for the maintenance of health and vigour (*Sū.* 5, 103). The use of collyrium at night and of eye-salve and eye-drops after exposure to glare are recommended for good eyesight. Smoking of pipes and cigars, containing medicinal herbs, at regular intervals everyday is said to prevent neuralgic pains and increase mental alertness (*Sū.* 5, 15-27), but many complications and even permanent injury may be caused by uncontrolled smoking, especially in an exhausted or intoxicated state (*Sū* 5, 38-45).

The application of medicated oil to the nostrils at prescribed times retards senility and maintains the acuteness of sight, smell and hearing (*Sū.* 5, 48-70).

Brushing the teeth twice a day with partly crushed green twigs of certain plants, and scraping the tongue with shaped metallic scrapers, ensure strong teeth, sweet breath and a good appetite. Medicated gargles keep the facial muscles young, sharpen taste, increase appetite, and prevent dental decay (*Sū.* 5, 71-80).

Daily massage of the scalp and hair with approved vegetable oils prevents insomnia, baldness, grey hairs and sagging of the face muscles (*Sū.* 5, 81-83).

Draining the ear-passage with oil prevents deafness and other affections of the ear (*Sū.* 5, 84).

Daily massage of the body prevents excessive sweating, removes offensive body-odour and gives suppleness to muscles and tendons (*Sū.* 5, 90-93). Massaging with oils acts as a tonic to the skin, induces tolerance to physical hardship, makes the contours of the body firm and the skin glossy (*Sū.* 5, 84-86).

Bathing promotes vitality, physical stamina, longevity and removes fatigue (*Su* 5, 94)

The feet and private parts are to be kept scrupulously clean, and the hair, beard and nails regularly trimmed (*Su* 5, 98)

The use of clean apparel, foot wear and umbrellas promotes mental as well as physical comfort, and ensures good health (*Su* 5, 95, 100 101)

Regulated physical exercise aids digestion and increases capacity for work and physical strength, but overexercise or excessive physical work, indicated by an increased rate of respiration and a feeling of oppression in the cardiac region, causes debility and wasting diseases (*Su* 7, 31 35)

In order to maintain good health one should not unnecessarily or unduly suppress the natural urges and body functions, he should not sleep in a crooked position, nor on a narrow and uneven bed, he should not ride on an uncomfortable saddle or carriage seat he should not gaze directly at the sun or strong lights, nor expose himself to strong sunlight, storm or snow fall for extended periods, nor warm himself directly before or over a fire, he should not indulge excessively in alcoholic drinks, heavy meals, or sexual acts, nor mate with a diseased or unfit partner, nor take part in unnatural or improper sexual relations he should avoid keeping late hours, taking a cold bath or a cold drink in a fatigued condition, and using soiled clothes after a bath (*Sū* 8, 19 22)

The mental impulses of greed, fear, anger, excessive melancholy, vanity, hatred, harsh speech and evil thoughts are as injurious to the body as to the mind (*Su* 7, 26 28)

All harmful physical and mental habits can be overcome gradually by proper training or by personal effort (*Su* 7, 36 38)

Special measures are recommended for the maintenance of health during seasonal changes Sudation, sunbath, warm apartments, thick and protective dress and bedding, and rich food are recommended when the cold season sets in (*Su* 6, 9 21) Physical exercise, lightly cooked meats and light alcoholic beverages are prescribed for spring time (*Su* 6, 24 26) Rich food, alcohol and hard exercise should be avoided in summer In the hottest days one should not venture out in the noon time heat, but take rest by sleeping during the day in order to compensate for keeping late hours at night (*Su* 7, 30) Thrice a year at prescribed seasons, the body should be cleansed of all accumulated waste matter by sudation, steam baths, emesis, purgative drugs, enemas, and douches (*Su* 7, 47)

## (*b*) Effects of Environment on Health

Caraka treats bodily health not only as a personal problem, but also in its relation to heredity (*Śa* 3, 3 17), geographical environment, climate, water supply and seasonal variations (*Vi* 3, 6) The possibility of diseases due to such external factors alone was recognized (*Vi* 3, 4)

3

According to Caraka, though individual persons differ widely in physical health and vitality, they are collectively liable to devastating epidemics caused by external factors (*Vi*. **3**, 6-7).

Inhabitants of open spaces with scanty rainfall, and predominance of dry winds and of isolated forest areas are generally well-knit, hardy and healthy. Inhabitants of humid climates with abundant rainfall, marshy lands, deltas, and dense forests are generally delicate in physique and in health. Areas with a proper balance of dry and moist seasons and of open spaces and forests generally contribute to good health (*Ka*. **1**, 8; *Vi*. **3**, 7, 47).

It is stated that from the beginning of the summer to the end of the rainy season there is a gradual waning of strength in man (*Sū*. **6**, 6-7). The cold season increases appetite and digestive power, when, with proper nourishment, the bodily vigour reaches its highest peak (*Sū*. **6**, 8-9).

(*c*) Nutrition and Diet

*Āhāratattva* (*Sū*. **25**, 35, etc.) or dietetics forms an important and integral part of the *Caraka Samhitā* (*Sū*. Chap. 5, 6, 25, 26, 27; *Śā*. Chap. 6). Wholesome diet is stated to promote bodily growth and health; unwholesome food is the most important cause of diseases (*Sū*. **25**, 31). The importance of a proper diet in health and sickness is repeatedly stressed upon (*Sū* Chap. 5, 6; *Śā*. Chap. 6). In the chapter on digestion it is asserted that the life-process itself depends upon the production of body-heat, derived from the food taken (*Ci*. **15**, 3-5).

A direct relationship is said to exist between the tastes of substances and their physiological actions. No distinction can be drawn between foods and drugs, as both possess taste and nutritive value, and exert specific action on the body.

Edible and potable substances are classified into cereals, legumes, potable water, salts, pot-herbs, fish, flesh, fruits, sugarcane derivatives, milk, ghee and other milk products, vegetable oils, lards, animal fats, and alcoholic beverages (*Sū*. **25**, 38). The most nutritive and the most harmful in each class are listed (*Sū*. **25**, 38-39). Eggs, blood and semen of various creatures are also stated to have nutritive value, though their use is not recommended (*Śā*. **6**, 10).

The text mentions in detail the digestibility, nutritive value and medicinal action of several hundred different edible and potable substances of various classes (*Sū*. Chap. 27). It is pointed out that all such substances can gain in nutritive value or become harmful by combination with other items, by cooking or preparation, and according to quantity taken, palatability, appetite, bodily health, local climate, season, and eating habits (*Sū*. **26**, 87-89). A list of substances which are incompatible with each other, or unwholesome in particular seasons, is given (*Sū*. **26**, 84 *et seq*.).

Even light, easily digested and nutritious food should not be taken in excess of bodily requirements, or after the appetite has been satisfied Difficultly digestible food should not be taken habitually If ever used, the quantity should not exceed a fraction of a full meal (*Su* 5, 7 11) Rich spicy foods, fats, and alcoholic drinks are stated to be beneficial in the cold season, lightly cooked cereals and meats, salts and light *wines in spring* and autumn, and light gruels, vegetables, fruits and acidulated cold drinks in *summer* (*Sū* Chap 6)

According to their intrinsic properties different foods undergo metabolism into body elements of the same nature and inhibit the formation of those having opposite properties (*Su* 6 16) A properly planned diet, using various aggreeable and nourishing foods in rotation, regulates the body-elements (*Su* 6, 6 and 7)

(*d*) Rejuvenation

Revitalization therapy is a prominent feature of the *Caraka Samhitā* It is suggested that the body fluids are capable of being replenished and renewed by proper medication and that it is possible to achieve not only vitality and vigour but also greater resistance to disease, longevity without senile decay heightened memory and intelligence, and an improvement in bodily strength personal beauty and sense perceptions In fact, Caraka asserts that even in old age it is possible to regain youth and remain youthful for a very *long period* (*Ci* 1/1, 6-12)

The treatment for rejuvenation follows the fulfilment of three preliminary conditions namely, *the patient must start with a single-minded determination* and complete faith, he should undergo the treatment in a nursing home (the exact specifications and equipment of which are listed), he *should* remain under the constant supervision of his physician The season and weather for treatment must be properly selected (*Ci* 1/1, 17 23)

The body is then thoroughly cleansed by oil massage and sudation by various means A course of intestinal aperients like myrobolans rock salt and special spices is given for cleansing the intestines The diet is limited to light gruel and warm water (*Ci* 1/1, 25-27)

*Many preparations are prescribed for the actual rejuvenation process* The fruits, plants and herbs used for such prescriptions must be collected from Himalayan forests in their proper seasons and in perfect and flawless state Pure honey, ghee, salts and minerals are also mentioned as ingredients in many prescriptions Special diets are described in all cases (*Ci* Chap 1)

Claims have been made that it is possible by a special course of rejuvenation to transform entirely an aged and diseased body into a fresh and youthful one in the course of six months (*Ci* 1/4, 7)

(e) Public Sanitation

Some advice regarding public sanitation is found in the *Caraka Saṃhitā*. People are urged to avoid all filthy matters like offal, broken fragments of cooking vessels, and waters of public baths (*Sū.* 8, 18/6). Blowing the nose in a crowd or committing nuisance on a public road is forbidden. Adultery, association with prostitutes, gambling, drunkenness, crude habits of eating, dirty or inadequate dress, and picking the nose, or sneezing, are considered unhealthy practices to be avoided by those aspiring after a clean and meritorious life (*Sū.* 8, 19-25).

Contaminated water is recognized to be a major cause of ill health and epidemics (*Vi.* 3, 7), and the use of only clean and pure water from natural sources is recommended at various places of the text (*Sū.* 6, 47, etc.).

## VI. PHYSICIANS IN CARAKA

The *Caraka Samhitā* lays down an elaborate code regarding the training, duties, privileges and social status of physicians.

Any person could aspire to be a physician, provided he had a clear idea of the duties and obligations pertaining to the profession. Good health, capacity for sustained effort and single-minded devotion to the science were considered as essential qualifications for the student of medicine. An austere and celibate life was enjoined for the disciple during his training period (*Vi.* 8, 3, 7, 13).

The student was free to choose his own branch of the science. The choice of a teacher also rested with him. But it was for the teacher to assess the merit of the candidate from his appearance, voice, acuteness of sensory perceptions, personality, intellectual capacity and mental outlook before selecting him as a disciple. Instructions were given free. The disciple lived with the preceptor like a son, slave or supplicant till the training was completed and had to follow a rigid time-table (*Vi.* 8, 3, 4, 7, 8, 13).

Aspiration for success, wealth and fame was considered normal on the part of an intending physician; but obligations to his future patients and to *the society were repeatedly impressed upon by the preceptor.* Desertion of, or injury to, patients under any circumstances was strictly forbidden (*Vi* 8, 13).

A physician should remain, in a sense, a student all his life, gaining experience, knowledge and understanding. Great stress has been laid on periodic discussions and debates with other physicians in conferences and in private (*Vi.* 8, 13, 20). *Theoretical knowledge, clarity of reasoning,* wide practical experience, and personal skill have been described as the four valued qualifications of the physician (*Vi*, 9, 6). He is expected to lead a disciplined and unostentatious life, to be pleasant in his manners, and to be considerate and

gentle in speech (*Vi* 8 13) Friendship towards all, compassion for the ailing, devotion to professional duties and a philosophical attitude to cases with fatal endings—these have been defined as the four corner stones of medical practice (*Su* 9, 26) Caraka advises that the physicians, while treating diseases, should also observe the *instructions of the Atharvaveda*, which include *svastyayana* (propitiatory rites), *bali* (offerings), *mangala homa* (auspicious oblations), *niyama* (penances), *prayaścitta* (purificatory rites), *upavasa* (fasting) and *mantra* (incantations), as also the use of *mani* (gems) in amulets (*Su* 30, 21, 26, 70, *Ci* 1, 3)

According to Caraka a physician is not expected to treat a person hated by the king or by the public (*Vi* 8, 13), or a habitually vicious or dishonourable person (*Vi* 3, 45) *He is also not expected to treat patients suffering from* incurable maladies (*Sū* 10, 8)

The physician must not enter a private house without previous permission or proper introduction, nor attend a woman in the absence of her husband or guardian He must not also say or do anything which might shock the patient or the relations and friends of the patient He must not divulge any information about the patient and his household (*Vi* 8, 13)

The physician, according to Caraka, should be held in high respect both by the king and the public (*Su* 9, 19) The practice of medicine by unqualified *persons or self styled physicians has been strongly condemned (Sū* 29, 12)

The physician is expected to maintain his own nursing home and dispensary, prepare medicinal preparations from raw materials, and arrange for the services of nurses and qualified attendants (*Sū* Chap 15)

## VII DIAGNOSIS OF DISEASES

The Samhitā gives directions for the diagnosis of a large number of diseases from a consideration of their etiology symptoms and prognosis It *also contains an exposition of the general theory* and methods of diagnosis

According to Caraka there are three means open to the physician for ascertaining the nature of any *sickness* They are (*i*) *theoretical knowledge* of the possible causes and symptoms of all known diseases, (*ii*) meticulous observation of the patient's symptoms and complaints, (*iii*) inferences based on previous experience In the absence of one or more of the three aids to diagnosis, or with their fragmentary or incorrect knowledge, the physician cannot come to a true conclusion (*Vi* 4 3 5)

At another place Caraka again states that the three methods for the ascertainment of the nature of diseases are *nidāna* (cause and effect relation *pūrvarūpa* (invariable prognostication), and *upaśaya* and *anupaśaya* (concomitant variation) (*Vi* 1, 7, 8 10)

It is essential for the physician to have an exhaustive theoretical know

ledge of the nature of all diseases—their specific sources, exciting factors, preliminary indications, bodily symptoms, local pains caused by them, possible complications and aggravations, degrees of severity, periods of duration, and indications of recovery and convalescence By interrogation and by the application of his own trained senses the physician should conduct a detailed examination of the patient's appearance, voice, abnormalities, intestinal and other internal sounds, blood and other body fluids, and bodily excretions If necessary, he should draw a sample of the patient's blood and test it by offering it to a dog or a crow He should also gather all possible information regarding the digestion, bowel movement, vitality, acuteness of sensory perceptions, clarity of mind, memory, psychic condition, irregularities of behaviour, dreams, aversions, hankerings and complaints of the patient Latent symptoms, if any, should be tested by provocative medication Only then he can make a diagnosis of the ailment, determine the expectation of recovery or imminence of death, and decide upon a course of treatment (*Vi* 4, 6 9) It has been emphasized that fever is the first symptom of all diseases (*Ni* 1, 16)

Diseases can be mild or severe The preliminary symptoms are often the same In fact, the behaviour, bodily appearance and apparent vitality of the patient may sometimes give false indications *It is easy for the inex*perienced physician to jump to conclusions on insufficient or misleading evidence A mild palliative prescribed for a disease which is destined to become serious, or a strong medicine for a mild variety, may cause considerable injury to the patient, even death may result Mere identification of a disease does not mean its diagnosis, it is absolutely necessary to foresee its possible course and severity (*Vi* 7, 2, 3, 5, 7)

Some diseases are incurable and are known as such by their peculiar symptoms, such symptoms often indicate the period the patient will survive (*Ni* 1, 6, *In* Chap 6 & 7) Some diseases are secondary, being caused by others occurring earlier They may occur after the original malady subsides, or may run simultaneously with the later phase of the primary disease (*Ni* 8, 20 23)

In diagnosis the patient's personal history and background are of great importance Residents of different countries are used to different diets, have different habits, and differ in physical fitness and mental inclinations Hence, what is wholesome and normal for one type of people may have opposite effects on another The liability to diseases of a person depends upon his place of birth, normal place of residence and accidental presence in a foreign country (*Vi* 8, 93)

The patient's nature, abnormalities, vitality, physical build, bodily proportions, physical equilibrium, psychic condition, capacity for food, capacity for physical exercise, and age — all are important factors in diagnosis (*Vi* 8, 94)

If the body elements are individually healthy and collectively in harmony with each other, the patient is highly resistant to diseases and specially to diseases of the severe type (*Vi* 8, 111) He is also not easily affected by senile decay The opposite is true for people with unhealthy and unbalanced body elements (*Vi* 8, 112) In addition to these extreme cases, there are also intermediate types (*Vi* 8 113)

## VIII METHODS OF TREATMENT, INCLUDING SURGERY

Different types of methods for the treatment of diseases have been described by Caraka, as follows

(1) *Oral medication* by single or compounded medicinal substances, sometimes more than fifty in a prescription are listed Special emphasis is laid on diet, considered an essential part of the treatment (*Su* Chap 5, 6, 25, 26, 27) Purgation and/or emesis is frequently recommended for cleansing the system of accumulated waste materials Apart from drugs, purging is also effected by enemas (*Ci* Chap 7, 13, etc , *Si* Chap 9 12)

(2) (*a*) *Eye-drops and salves* for eye diseases and loss of visual power (*Su.* 5, 18, etc )
(*b*) *Gargles* for diseases of the mouth, throat, teeth and gums (*Su* 5, 78, 79, etc )
(*c*) *Medicinal cigars and smoking mixtures* for affections of the head, nose, throat and bronchial tract (*Su* 5, 24, etc )
(*d*) *Nasal medication in the form of powders, ointments, or inhaled fumes* for psychic disorders, fainting fits, and affections of the nose (*Sū* 5, 13 14, etc ) In epilepsy and insanity, herbs and animal substances are burnt for inhalation (*Ci* Chap 10)

(3) *Liquid unguents, creams, salves, ointments lotions and medicated oils* for the skin and other parts (*Ci* Chap 6, 7, etc )

(4) *Suppositories, tampons, and soaked cotton swabs* for ear passages and lower orifices of the body (*Ci* Chap 7, 8, etc )

(5) *Enemas* of nutritive and healing fluid mixtures for absorption in the rectal and vaginal passages in wasting diseases, debility and fractures (*Si* Chap 3, 5, 12, etc )

(6) *Douches* for flushing the rectal, vaginal and urethral passages and for relieving congestion (*Su* Chap 9, 10, etc ) Douche cans, tubes, and catheters, made of gold, silver or alloys, were used for this purpose (*Su* 1, 44, 45, etc )

(7) *Sweating* the body surface by sun bath, heated air, steam, or contact with hot surfaces for cleansing the system of absorbed impurities, sudation by steaming decoctions of medicinal

substances, vapours, fomentation, poultices, solid lumps of medicinal matter and hot immersion bath (*Sū* Chap 14)

(8) *Bandages, splints and tourniquets* in fractures and surgical conditions (*Si* Chap 9) *Ligatures* for poisonous bites and for surgical operations (*Ci* Chap 23, 24, etc )

(9) *Bleeding* by incision, or by the application of leeches, in poisonous bites, epilepsy, rheumatism, etc (*Ci* Chap 10, 23, etc )

(10) *Excision, incision, puncturing, removal of the skin layer, cauterization, surgical removal, rupturing, probing and other surgical methods* (*Su* **11**, 55), the removal of a dead foetus (*Śa* **8**, 30, *et seq* ) and an operation for peritonitis (*Ci* **13**, 185 *et seq* ) have been described in some detail, scalpels, metallic probes, etc were used in such processes (*Si* Chap 9) The use of live ants of the big variety to grip together and hold tight the skin flaps after an internal operation has been described (*Ci* **13** 190 *et seq* ) The ants were killed by hot water and cut in two, with their gripping jaws left behind

(11) *Psychiatric methods* for curing mental conditions (*Vi* Chap 6)

In the treatment of all diseases the physician should take care to perform the following preparatory processes purification (purgation, emesis, etc ), tranquilization (use of sedatives) of the system, and avoidance of all causative factors (*Vi* **8**, 30)

## IX POISONS

The *Caraka Samhita* includes a detailed discussion of the various categories of poisons and the means by which they enter the human system, their symptoms, effects and antidotes are also described

The venoms secreted by animals, reptiles, aquatic creatures and insects are conveyed by their bites They generally act very rapidly causing burning sensation, inflammation, swelling, drowsiness, fainting and diarrhoea The symptoms are more pronounced in the lower extremities of the body (*Ci* **10**, 15, 17, 23)

Poisons from vegetable roots and bulbs, mineral poisons and artificially prepared poisons enter the human body through foods, beverages, water, smoke, vapours, skin applications, or by mere contact (*Ci* **23**, 106 122) Such poisons act slowly and cause fever, spasms, throat contraction, muscular rigidity, partial paralysis, frothy salivation and vomiting The symptoms are more pronounced in the upper parts of the body (*Ci* **23**, 16-17)

The toxic effects are liable to be mistaken for diseases (*Ci* **23**, 18) They vitiate the blood and other body elements progressively, eight distinct stages with increasingly graver symptoms have been noted (*Ci* **23**, 14) Death may be caused by poisoning in the absence of proper treatment (*Ci* **23**, 31)

Treatment for poisoning consists in the immediate application of stimulants to protect the heart, followed by *incision, tourniquets, ligatures, suction,* blood letting, application of freshly cut meat, oral medicines and counter-*poisons,* according to the nature of the toxic substance (*Ci* **23,** 35 50) For poisoning through food, drinks, etc, the immediate treatment is emesis (*Ci* **23,** 122)

A description of the distinctive symptoms of bites by ten types of snakes (cobra, viper, etc), mosquitoes, poisonous flies, hornets spiders, scorpions lizards, rats, crabs, toads (*Ci* **23,** 124 158), dogs and some predatory animals (*Ci* **23,** 175, 220 232) is found in the text with specific antidotes for individual cases

The medicinal value of venoms and vegetable poisons were known in Caraka's time *They are described to have antagonistic effects in the presence* of each other (*Ci* **23,** 17) A significant passage states that even deadly poisons can be converted into excellent medicines by the right method of application (*Sū* **1,** 126)

Fumigation from vegetable and animal substances has been described as an antidote for most poisons (*Ci* **23,** 99) The insecticidal and vermicidal action of fumigation were also recognized and several recipes given for the purpose (*Ci* **23,** 98 100)

## X PHYSICOCHEMICAL PROCESSES

Many of the common laboratory processes known today are found in the *Caraka Samhita* They occur in various passages which give instructions for compounding medicinal preparations (*Ci* Chap 1, 2, 15, etc) A list of terms for such processes is given in Table 17

Actual weights of the various ingredients of prescriptions are given in many cases, volumes are given in some instances The *tula* (balance) was used for weighing, and *manabhandas* (measuring vessels) for measuring liquids (*Su* **15,** 7) A list of the apparatus, mentioned in the various processes, is given in Table 16

Descriptions of the following processes are given in some detail

(1) A flame test for food poisons (possibly copper salts), where the flame shows a colour like the feathers of a peacock (*Ci* **23,** 109)

(2) A process of destructive distillation (*Ci* **15** 174)

(3) A process for the separation of the volatile components of a mixture, using distillation and air condensation (*Ci* **1/2,** 14)

(4) A process for continuous extraction of the fatty matter present in a plant product by repeated distillation with a volatile oil, followed by its condensation (*Vi* **7,** 22)

For the purpose of heating, wood and the dried cakes of various animal dungs were used according to the temperature required (*Ci* Chap 1, 2, 15, etc)

The mechanical processes mentioned are listed in Table 18

## XI CLASSIFICATIONS

*Vibhagavidya* (*Vi* **4**, 4), or the theory of classification, is a feature of the *Caraka Samhita*

Many substances and phenomena are divided into rational groups

(1) The days of the *Samvatsara* (solar year) are divided into

- (*a*) *Udakayana* (period of absorption of moisture)
- (*b*) *Daksinayana* or *Visarga* (period of liberation of moisture)

Each of these periods is sub divided into three seasons (*Śu* **6**, 4)

(2) *Deśa* (habitable land) is classified according to topography, rainfall and vegetation into

- (*a*) *Jangala* (dry grass lands)
- (*b*) *Anupa* (wet lands)
- (*c*) *Sadhārana* (intermediate types) (*Ka* **1**, 8)

(3) *Prāni* (living creatures) are classified according to their manner of birth as

- (*i*) *Jarayuja* (born of womb)
- (*ii*) *Andaja* (born of eggs)
- (*iii*) *Svedaja* (born of heat and moisture)
- (*iv*) *Udbhidja* (born of seeds) (*Śā* **3**, 16)

They are also classified in different contexts as

- (*a*) *Krmi* (parasites found in living creatures) (*Sū* **19**, 4 9)
- (*b*) *Kīta* (wingless insects) (*Sū* **27**, 213)
- (*c*) *Patanga* (flying insects) (*Śa* **8**, 59)
- (*d*) *Ekaśapha* (solidungulate animals) (*Sū* **27**, 211)
- (*e*) *Dviśapha* (cloven footed animals) (*Ci* **17**, 118)
- (*f*) *Mrga* (herbivorous animals) (*Sū* **13**, 11)
- (*g*) *Kravyada* (carnivorous animals) (*Su* **22**, 27)
- (*h*) *Śvapada* (dangerous beasts of prey) (*Śa* **8**, 59)
- (*i*) *Vyala* (beasts of prey) (*Ci* **23**, 176)
- (*j*) *Gomāyu* (creatures with poisonous fangs or stings) (*Ci* **23**, 10)
- (*k*) *Sarpa* (snakes) (*Su* **27**, 213)

Creatures, whose flesh has got dietic value, have been divided into eight groups (*Su* chap 27) Table I gives a list of these groups

(4) *Udbhid* substances (plants or vegetation) are said to be of four types

- (*i*) *Vanaspati* (bearing fruits only)
- (*ii*) *Vanaspatya* (bearing fruits as well as flowers)

(iii) *Osadhi* (dying after bearing fruits)
(iv) *Virudha* (shrubs or herbs)

*Udbhid* substances (plants) also are divided in fifty groups according to the physiological actions of their decoctions (*Su* chap 4)

(a) *Jivaniya* (promoter of longevity)
(b) *Brmhaniya* (roborant and nourishing)
(c) *Lekhaniya* (reducing obesity and scarifying)
(d) *Bhedaniya* (promoter of excretion)
(e) *Sandhaniya* (promotes joining of fractured parts)
(f) *Dipaniya* promoter of digestion)
(g) *Balya* (promoter of strength)
(h) *Varnya* (brightens complexion)
(i) *Kanthya* (improves voice)
(j) *Hrdya* (cordial)
(k) *Trptighna* (removes sense of satiety)
(l) *Arśaghna* (curative of piles or haemorrhoids)
(m) *Kusthaghna* (curative of obstinate skin diseases)
(n) *Kandughna* (curative of pruritus)
(o) *Krmighna* (curative of worms)
(p) *Visaghna* (antidote to poisoning)
(q) *Stanyajanana* (promoter of lactation)
(r) *Stanyaśodhana* (purifier of breast milk)
(s) *Śukrajanana* (promoter of semen generation)
(t) *Śukraśodhana* (purifier of semen)
(u) *Snehopaga* (emollient)
(v) *Svedopaga* (diaphoretic)
(w) *Vamanopaga* (emetic)
(x) *Virecanopaga* (purgative)
(y) *Arusthapanopaga* (useful in corrective enemas)
(z) *Anuvasanopaga* (useful in enemas)
(aa) *Śirovirecanopaga* (prevents discharges from the nose)
(bb) *Chardinigrahana* (curative of nausea)
(cc) *Trsnanigrahana* (curative of morbid thirst)
(dd) *Hikkanigrahana* (curative of hiccup)
(ee) *Purisasamgrahaniya* (renders faecal matters consistent)
(ff) *Purisavirajaniya* (alters colour of faecal pigment)
(gg) *Mutrasamgrahaniya* (corrective of excessive urination)
(hh) *Mutravirajaniya* (curative of coloured urine)
(ii) *Mutravirecaniya* (diuretic)
(jj) *Kaśahara* (curative of cough)
(kk) *Śvasahara* (curative of laboured breathing)
(ll) *Svayathuhara* (curative of swelling and oedema)

(mm) *Jvarahara* (curative of fever)
(nn) *Śramahara* (curative of fatigue)
(oo) *Dahapraśamana* (curative of burning sensation)
(pp) *Śitapraśamana* (curative of the sensation of cold)
(qq) *Udardapraśamana* (curative of urticaria)
(rr) *Angamardapraśamana* (relieves pain in the limbs)
(ss) *Śūlapraśamana* (cures pain in the bowels)
(tt) *Sonitasthapana* (haemostatic)
(uu) *Vedanasthapana* (anodyne)
(vv) *Samjnasthapana* (resuscitative)
(ww) *Prajasthapana* (procreant, or curative of sterility)
(xx) *Vayahsthapana* (prevents ageing)

A mention of the classification of plants into male and female varieties is found in Caraka in the case of the *kutaja* (*Holarrhena antidysentrica*) plant (*Ka* 5, 3, 5)

(5) *Dravya* (material substance) can be of three types in the context of their medicinal use

(i) *Jangama* (originating from mobile living bodies)
(ii) *Udbhid* (originating from plants)
(iii) *Parthiva* (of mineral origin) (*Su* 1, 68)

(i) *Jangama* substances used in medicine are *madhu* (honey), *gorasa* (milk), *pitta* (bile), *vasā* (fat), *majja* (bone marrow), *asrk* (blood), *amsa* (flesh), *mutra* (urine), *carma* (hide), *retas* (semen), *asthi* (bone), *snayu* (tendon or ligament), *śrnga* (horn), *nakha* (nail), *khura* (hoof), *keśa* (hair), *loma* (fur or body hair), *rocana* (a bright yellow deposit obtained from bile) (*Su* 1, 69)

(ii) *Udbhid* substances used in medicine are *mula* (root), *tvak* (bark), *sara* (pith), *niryasa* (resin or exudate), *nala* (hollow stem or stalk), *khara* (prickly or rough parts), *pallava* (sprout or shoot), *ksara* (alkaline matter), *ksira* (sap), *phala* (fruit), *puspa* (flower), *bhasma* (ash), *tailani* (expressed or essential oils), *kantaka* (thorn), *patrani* (leaves), *sunga* (sheath or calyx of bud), *kanda* (bulb), *praroha* (parasitic growth) (*Sū* 1, 73 74)

(iii) *Parthiva* substances used in medicine are *suvarna* (gold) *pañcaloha* (the five base metals, namely, silver, copper, iron, tin, lead), *mala* (the ores or corroded forms of the base metals), *sikata* (sand), *manahśila* (realgar), *mani* (gem or precious stone), *lavana* (salts), *gairika* (red ochre), *anjana* (antimony black), *ala* (yellow orpiment)

(6) Natural waters are classified according to their sources (Table 6)

(7) Diseases are classified as

(a) *Nijaśarıradoṣa* (inborn)

(b) *Āgantuja* (communicated from outside)

(c) *Mānasa* (mental) (*Su* **II**, 45)

(8) Poisons are classified into

(a) *Jangama viṣa* (venom)

(b) *Sthavara viṣa* (vegetable poisons)

(c) *Garaviṣa* (artificially prepared or mineral poisons) (*Ci* Chap 23)

(9) *Kṛmi* (parasites of the body) are classified as

(a) *Sahaja* (symbiotic parasites)

(b) *Purīṣaja* (derived from faeces)

(c) *Kaphaja* (derived from mucus)

(d) *Śoṇitaja* (derived from the blood stream)

(e) *Malaja* (derived from the waste products of the body) (*Su* Chap 19)

# TABLE 1

## *Living Creatures*

| Name in Caraka, reference, and synonyms (if any) | English and/or Latin name | Modern classification |
|---|---|---|
| **PRASAH-VARGA**<br>(*Sū* **27**, 35, 36) | Creatures which grab and tear off their food | |
| 1 AŚVA<br>*Syn*<br>HAYA *In* **12**, 83<br>TURAGA *Vi* **3** 36<br>TURANGA *Ci* **9**, 154<br>VĀJIN *Su* **1**, 104 | Horse (*Equus caballus*) | Mammal |
| 2 AŚVATARA | Mule | ,, |
| 3 BABHRU | Large brown mongoose (*Herpestes mungo*) | ,, |
| 4 BHĀSA | Bearded vulture (*Gypatus barbatus*) | Bird |
| 5 CĀSA | Blue jay (*Cyanocitta cristata*) | ,, |
| 6 DHUMIKĀ | Owlet (*Athene brama*) | ,, |
| 7 DVĪPIN | Panther (*Felis pardus*) | Mammal |
| 8 GO<br>*Syn*<br>DHENU *Ci* **2/3**, 3<br>VRṢA *Si* **12**, 18<br>RṢABHA *Ci* **10** 48<br>JĀRADRAVA *Si* **3**, 10 | Cow (*Bos tauras*) | |
| 9 GRDHRA | Vulture (*Vulture monachus*) | Bird |
| 10 JAMBUKA<br>*Syn*<br>ŚRGĀLA *Ci* **10**, 41 | Jackal (*Canis aureus*) | Mammal |
| 11 KHARA | Ass (*Asinus equidae*) | ,, |
| 12 KULIṄGAKA | Sparrow hawk (*Ploceus bengalensis*) | Bird |
| 13 KURARA | Osprey (*Pandion heliactus*) | ,, |
| 14 LOPĀKA | Fox (*Vulpus bengalensis*) | Mammal |
| 15 MADHUHĀ | Honey buzzard (*Pernis apivorus*) | Bird |
| 16 MĀRJĀRA<br>*Syn*<br>VIḌĀLA *Ci* **10**, 41 | Cat (*Felis domesticus*) | Mammal |
| 17 MUṢIKA<br>*Syn*<br>MUṢAKA *Vi* **3** 7/3<br>UNDURA *Ci* **23**, 9 | Mouse (*Mus musculus*) | Mammal |
| 18 RKṢA | Bear (*Melusus labiatus*) | ,, |
| 19 ŚAŚAGHNA | Golden eagle (*Aquilar chrysaetos*) | Bird |
| 20 SIMHA | Lion (*Felis leo*) | Mammal |
| 21 ŚYENA | Hawk (*Accipiter gentilis*) | Bird |
| 22. TARAKṢU | Hyena (*Hyaena striata*) | Mammal |

TABLE I—(Contd.)

| Name in Caraka, reference, and synonyms (if any) | English and/or Latin name | Modern classification |
|---|---|---|
| 23 ULUKA | Indian horned owl (*Bubo bengalensis*) | Bird |
| 24 UṢṬRA<br>*Syn*<br>KARABHA Ci 13, 107 | Camel (*Camelus dromedarius*) | Mammal |
| 25 VĀNARA | Hanuman or Langur (*Semnopithecus entellus*) and other Indian monkeys (*Semnopithecus*) | " |
| 26 VĀNTADA<br>*Syn*<br>ŚVAN Ci 10, 41 | Dog (*Canis familiaris*) | Mammal |
| 27 VĀYASA<br>*Syn*<br>KĀKA Ci 23, 47 | Crow (*Corvus splendens*) | Bird |
| 28 VṚKA | Wolf (*Canis lupus*) | Mammal |
| 29 VYĀGHRA<br>*Syn*<br>ŚĀRDŪLA Ci 23, 192 | Tiger (*Felis tigris*) | " |
| **BHŪMIŚAYA-VARGA**<br>*Su* 27, 37, 38 | Burrowing animals | |
| 1 BHEKA<br>*Syn*<br>MAṆḌŪKA Ci 23, 9 | Frog (*Rana*) | Amphibia |
| 2 CILLATA | Water shrew (*Neomys fodiens*) | Mammal |
| 3 CITRAPRAṢṬHA KĀKULIMṚGA | Reticulated python (*Python reticulus*) | Reptile |
| 4 GANḌAKA | Gecko lizard (*Ge konida*) | " |
| 5 GODHĀ | Iguana lizard (*Iguanidae*) | " |
| 6 KADALIN | Marmot (*Marmota*) | Mammal |
| 7 KṚṢṆAKĀKULIMṚGA | Black python (*Python molurus*) | Reptile |
| 8 KURCIKĀ | Hedge-hog (*Erinaceus europaeus*) | Mammal |
| 9 NAKULA | Small mongoose (*Herpestes mungo*) | " |
| 10 ŚALLAKA | Porcupine (*Acanthion leucura*) | " |
| 11 ŚVĀVIT | Pangolin (*Manis pentadactyl*) | " |
| 12 ŚVETAKĀKULIMṚGA | White python (*Python molurus*) | Reptile |
| 13 ŚYĀMAKĀKULIMṚGA | Dark grey python (*Python molurus*) | " |
| **ANUPA-VARGA** *Su* 27 39 | Creatures that dwell in marshy and wet lands | |
| 1 CAMARA | Yak (*Poephagus grunniens*) | Mammal |
| 2 GAJA<br>*Syn*<br>HASTĪN *Su* 1, 102<br>KUÑJARA Ci 10, 40 | Elephant (*Elaphus indicus*) | |
| 3 GAVAYA | Goyal ox (*Bos frontalis*) | " |

TABLE I—(Contd.)

| Name in Caraka, reference, and synonyms (if any) | English and/or Latin name | Modern classification |
|---|---|---|
| 4 KHAṄGA | Rhinoceros (*Rhinoceros unicornis*) | Mammal |
| 5 MAHIṢA *Syn* RAKTĀKṢA *Ci* 4, 4 | Buffalo (*Bos bubalus*) | " |
| 6 NYĀṄKU | Hog deer (*Cervus porcinus*) | " |
| 7 RURU | Swamp deer (*Rucervus durancelli*) | " |
| 8 ŚṚMARA | Indian wild boar (*Sus cristatus*) | " |
| 9 VARĀHA | Pig (*Sus scrofa*) | " |
| **VĀRIŚA-VARGA** *Su* 27 40 | Creatures that live under water | |
| 1 CULUKI | Porpoise (*Neomeris phocaenoides*) | Mammal |
| 2 KARKAṬAKA *Syn* UCCIṬIṄGA *Ci* 23, 153 | Crab (*Brachyura*) | Crustacea |
| 3 KUMBHĪRA *Syn* NAKRA *Ci* 2/2, 10 | Gharial crocodile (*Crocodylus porosus*) | Reptile |
| 4 KŪRMA *Syn* KACCHAPA *Ci* 2/2, 10 | Tortoise or turtle (*Chelonia*) | |
| 5 MAKARA | Capricorn (Sea monster ?) | |
| 6 MATSYA | Fish (*Pisces*) | Fish |
| 7 ŚAṄKHA | Conch snail (*Gastropoda*) | Gastropoda |
| 8 ŚIŚUMĀRA | Dolphin (*Dolphinus gangetica*) | Mammal |
| 9 ŚUKTI | Pearl oyster (*Margaritifera*) | Mollusca |
| 10 TIMIṄGILA | Whale (*Cetacea*) | Mammal |
| **AMBUCĀRI-VARGA** *Su* 27, 41-44 | Creatures that live around, or on the surface of, water | |
| 1 AMBUKUKKUṬĪ | Moor hen (*Gallinula chloropus*) | Bird |
| 2 ĀRĀ | Avocet (*Recurvirostra avosetta*) | " |
| 3 BALĀKĀ | Crane (*Ardea nivea*) | " |
| 4 CAKRAVĀKA | Ruddy sheldrake (*Anas casarca*) | " |
| 5 HAMSA *Syn* DHĀRTARĀṢṬRA *Su* 27, 85 | Swan (*Cygnus olor*) | |
| 6 KADAMBA | Grey leg goose (*Anser anser*) | " |
| 7 KĀKATUṆḌAKA | River tern (*Sterna hirundo*) | " |
| 8 KĀMAKĀLI | Tropic bird (*Phaethon rubricauda*) | " |
| 9 KĀRAṆḌAVA | White-fronted goose (*Anser albifrons*) | |
| 10 KEŚARIN | Curlew (*Oedicnemus crepitans*) | |

TABLE I—(Contd)

| | Name in Caraka, reference, and synonyms (if any) | English and/or Latin name | Modern classification |
|---|---|---|---|
| 11 | KRAUÑCA | Demoiselle crane (*Anthropoides virgo*) | Bird |
| 12 | MADGU | Small cormorant (*Phalacrocorax pygmaeus*) | " |
| 13 | MANITUNDAKA | Oyster catcher (*Haematopus ostrolegus*) | " |
| 14 | MEGHARĀVA | Trumpeteer swan (*Cygnus buccinator*) | " |
| 15 | MṚNĀLAKANṬHA | Snake bird (*Plotus anginga*) | " |
| 16 | NANDĪMUKHA | Flamingo (*Phoenicopterus roseus*) | " |
| 17 | PĀKAHAṂSA | Mute swan (*Cygnus olor*) | " |
| 18 | PLAVA | Pelican (*Pelicanus onocrotalus*) | " |
| 19 | PUṢKARĀVYA | Lily trotter (*Ardea sibirica*) | " |
| 20 | PUṆḌARĪKĀKṢA | White-eyed pochard (*Nyroca ferina*) | " |
| 21 | RAKTAŚĪRṢAKA | Purple heron (*Ardea purpurea*) | |
| 22 | ROHINĪ | Common teal (*Anas crecca*) | " |
| 23 | SAHACĀRIN | Petrel (*Oceanitidae*) | " |
| 24 | ŚARARA | Skimmer bird (*Rhynchops*) | " |
| 25 | SĀRASA | Indian crane (*Megalornis grus*) | " |
| 26 | SUMUKHA | Mandarin duck (*Anas galericulata*) | " |
| 27 | UTKOṢA | Mallard (*Anas platyrhynchos*) | " |
| 28 | VAKA | Heron (*Ardea goliath*) | " |
| 29 | VĀTI | Little grebe (*Podiceps ruficollis*) | " |
| | **JAṄGALA-VARGA** *Su* **27**, 45, 46 | Herbivorous animals living in grass-lands or forests | |
| 1 | CĀRUṢKA | Gazelle (*Gazelle bennetti*) | Mammal |
| 2 | ENA | Fawn deer (*Cervus rusa*) | " |
| 3 | GOKARNA | Cow-eared deer (*Antilope picta*) | " |
| 4 | HARIṆA | Black buck (*Antilope cervicapra*) | " |
| 5 | KĀLAPUCCHAKA *Syn* ASITAPUCCHAKA *Ci* **14**, 138 | Black tailed deer (*Odocoilus* ?) | " |
| 6 | KOṬṬAKĀRAKA | Barking deer (*Cervus muntjae*) | Mammal |
| 7 | KṚṢNA | Musk deer (*Moschus moschiferus*) | " |
| 8 | KURANGA | Indian antelope (*Antilope cervicapra*) | " |
| 9 | MṚGAMĀTṚKĀ | Red deer ? (*Cervus elaphus*) | " |
| 10 | PṚSATA | Spotted deer (*Cervus axis*) | " |
| 11 | RĀMA | Kashmir red deer (*Cervus elaphus*) | " |
| 12 | SAMBHARA | Sambhar (*Cervus unicolor*) | " |
| 13 | ŚARABHA | Wapiti (*Cervus canadensis*) ? | " |

TABLE I—(Contd )

| Name in Caraka, reference, and synonyms (if any) | English and/or Latin name | Modern classification |
|---|---|---|
| 14 ŚAŚA | Hare or rabbit (*Leporidae*) | Mammal |
| 15 ŚVADAMṢṬṚ | Mouse deer (*Tregulus memmna*) | „ |
| 16 URANA | Oorial or wild sheep (*Ovis vignei*) | „ |
| 17 VARAPOTA | Small antelope (*Antilope cervicapra*) | „ |
| **VIṢKIRA-VARGA** *Su* **27, 47, 49** | Birds that scatter their food | Gallinaceous birds |
| 1 AVAKARA<br>*Syn*<br>MAYŪRA *Su* 26, 84<br>ŚIKHIN *Su* 27, 58<br>BARHIN *Ci* 23, 182 | Peacock or pea-fowl (*Pavo cristatus*) | Bird |
| 2 CAKORA | Greek pheasant (*Perdix rufa*) | „ |
| 3 GIRIVARTAKA | Mountain quail (*Coturnix coturnix*) | „ |
| 4 GONARDA | Hill partridge (*Ardea sibirica*) | „ |
| 5 INDRĀBHA | Hedge sparrow (*Leucocerea aureola*) | „ |
| 6 KANKA | Heron (*Ardeidae*) | „ |
| 7 KAPIÑJALA | Black partridge (*Francolinus vulgaris*) | „ |
| 8 KRAKARA | Snipe (*Ardea virago*) | „ |
| 9 KUKKUBHA | Crow pheasant (*Coccyzus*) | „ |
| 10 KUKKUṬA<br>*Syn*<br>CARANĀYUDHA *Sū* 7, 11<br>DAKṢA *Si* 10, 11<br>TĀMRACŪḌA *Ci* 2/2, 28 | Red-spur fowl (*Galloperdix spadicea*) | „ |
| 11 LAVA | Bustard quail (*Turnix suscitates*) | „ |
| 12 RAKTAVARTMAKA | Red jungle fowl (*Gallus ferruginous*) | „ |
| 13 SĀRAPADA | Stork (*Ciconia boyciana*) | „ |
| 14 TITTIRI | Gray partridge (*Arborophila torquala*) | „ |
| 15 UPACAKRA | Smaller Greek pheasant (*Perdix rufa*) | „ |
| 16 VARAPADA | Spoon-bill (*Platela leucorodia*) | „ |
| 17 VARTAKA | Indian button quail (*Turnix indica*) | „ |
| 18 VARTIKĀ | Bush quail (*Coturnix sylvatica*) | „ |
| 19 VARTIRAKA | Rain quail (*Coturnix coromandelica*) | „ |
| **PRATUDA-VARGA** *Sū* **27, 50-52** | Birds that peck and gobble their food | Bird |
| 1 AṄGĀRACŪḌAKA | Black bulbul (*Microscelis psaroides*) | „ |
| 2 ATYUHA | Red-vented bulbul (*Molpastes haemorrhous*) | „ |
| 3 BABHRU VATAHĀ | Brown tree-pie (*Dendrocitta rufa*) | „ |
| 4 BHṚṄGARĀJA | Shrike (*Laniidae*) | „ |
| 5 CAṬAKA<br>*Syn*<br>KULIṄGA *Si* 12, 19 1 | Tree sparrow (*Passer montanus*) | „ |

TABLE I—(Contd )

| Name in Caraka, reference, and synonyms (if any) | English and/or Latin name | Modern classification |
|---|---|---|
| 6 CIRAṬI | Babbler (*Timelidae*) | Bird |
| 7 ḌINḌIMĀNAKA | Toucan (*Ramphistos piscivorous*) | „ |
| 8 DUNDUBHI | Grey hornbill (*Lophoceros birostris*) | „ |
| 9 GOPAPUTRA | Cow bird (*Molothrus*) | „ |
| 10 JAṬI | Indian hoopee (*Upupa indica*) | „ |
| 11 JĪVAJĪVAKA Syn JĪVAÑJĪVA In 12, 73 | Peacock pheasant (*Chalcurus*) | „ |
| 12 KAIRĀTA | Red faced malkoha (*Pheanicophaes pyrrhocephalus*) | „ |
| 13 KALĀVIṄKA | House sparrow (*Passer domesticus*) | „ |
| 14 KANKU | Blossom headed parakeet (*Torquatus rosa*) | „ |
| 15 KAPOTA | Spotted pigeon (*Chalesphaps indica*) | „ |
| 16 KOKILA Syn VĀSANTAKA Ci 14 56 | Indian koel (*Endynamis honorata*) | „ |
| 17 KOJAṢṬHI | Green bill coucal (*Centropus chlorhynchus*) | „ |
| 18 KULIṄGAKA | Weaver bird (sparrow hawk) (*Ploceus bengalensis*) | „ |
| 19 LAṬṬAŚĀKA | Paradise flycatcher (*Muscicapidae techitrea*) | „ |
| 20 LAṬVĀ | Pied flycatcher (*Muscicapidae atricapilla*) | „ |
| 21 LOHAPṚṢṬA | King fisher (*Alcedo ispida*) | „ |
| 22 PĀKKĀRA | Green barbet (*Thereiceryx zeylonicus*) | „ |
| 23 PĀNḌANAVIKA | Wood pigeon (*Columba palumbas*) | „ |
| 24 PĀRĀVATA | Pigeon (*Columba treron*) | „ |
| 25 PRIYĀTMAJA | Indian babbler (*Argya caudata*) | „ |
| 26 SĀRANGA | Ringneck parakeet (*Palaeonis torquatus*) | „ |
| 27 ŚĀRIKĀ | Mynah (*Turdus salica*) | „ |
| 28 ŚATAPATRA | Black wood pecker (*Picus martius*) | „ |
| 29 ŚUKA | Green parakeet (*Psittacula spengeli*) | „ |
| 30 YAṢṬHIKĀ | Sun bird (*Nectarinidae*) | „ |
| **KṚMI-VARGA** Si 19, 4/9 | Parasites inhabiting the living body | Nematoda |
| (*a*) *Living in the body excretions* | | |
| 1 YŪKĀ | | |
| 2 PIPĪLIKĀ | | |
| (*b*) *Living in the blood* | | |
| 3 AUDUMBARA | | |
| 4 JANTUMĀTĀRA | | |

TABLE I—(Contd.)

| Name in Caraka, reference, and synonyms (if any) | English and/or Latin name | Modern classification |
|---|---|---|
| 5 KEŚADA | | |
| 6 LOMADA | | |
| 7 LOMADVĪPA | | |
| 8 SAURASA | | |
| (c) *Living in the mucus and phlegm* | | |
| 9 ANTRADA | | |
| 10 CURU | | |
| 11 DARBHA-PUṢPA | | |
| 12 HṚDAYADA | | |
| 13 MAHĀGUDA | | |
| 14 SAUGANDHIKA | | |
| 15 UDARAVEṢṬA | | |
| (d) *Living in the faeces* | | |
| 16 KAKERUKA | | |
| 17 LELIHA | | |
| 18 MAKERUKA | | |
| 19 SAŚULAKA | | |
| 20 SAUSURADA | | |
| **GOMĀYU-VARGA** *Ci* 23, 9, 10 | Creatures with poisonous fangs or stings | |
| 1 ĀKHU | Rat (*Mus rattus*) | Mammal |
| 2 ĀŚĪVIṢA | Snake (*Ophidia*) | Reptile |
| 3 JALAUKAS | Leech (*Hirunidae*) | Chaetopoda |
| 4 KṚKAṆṬAKA | A type of scorpion (*Palamnaeus*) | Arachnida |
| 5 KUDYAKĪṬAKA | Wall lizard (*Lacerta muralis*) | Reptile |
| 6 LUTĀ | Spider (*Lycosidae*) | Arachnida |
| 7 MAṆḌŪKA | Frog (*Rana*) | Amphibia |
| 8 MATSYA | Fish (*Pisces*) | Pisces |
| 9 NAKULA | Mongoose (*Herpestes mungo*) | Mammal |
| 10 PATAṄGA | Flying insects | Hymenoptera & Diptera |
| 11 ŚĀRDŪLA | Tiger (*Felis tigris*) | Mammal |
| 12 ŚATAPADĪ | Centipede (*Chilopoda*) | Arthropoda |
| 13 SIṀHA | Lion (*Felis leo*) | Mammal |
| 14 STHAGIKĀ MAKṢIKĀ | Hornet or wasp (*Vespa*) | Hymenoptera |

TABLE I—(Contd)

| Name in Caraka reference and *synonyms* (*if any*) | English and/or Latin name | Modern classification |
|---|---|---|
| 15 ŚVAN | Dog (*Canis familiaris*) | Mammal |
| 16 TARAKṢU | Hyena (*Hyaena striatus*) | |
| 17 VIŚVAMBHARA | Scorpion (*Palamnaeus*) | Arachnida |
| ***SARPA VARGA Su 27 213*** | *Snakes (Ophidia)* | *Reptiles* |
| SARPA<br>*Syn*<br>AHI *Ci* 10 31<br>URAGA *Ci* 27 31<br>ĀŚĪVIṢA *Ci* 13 9 | | |
| 1 BHUJAGAPATI *Ci* 23 99 | King cobra (*Naja bungarus*) | |
| 2 DARVIKARA SARPA *Ci* 23 124 | Viper (*Bitis echis*) | |
| 3 GODHERAKA SARPA *Ci* 23 134 | Hybrid of the snake and the iguana (?) | |
| 4 GONASA-SARPA *Ci* 23 136 | ? | |
| 5 KṚṢNASARPA *Ci* 23 124 | A kind of poisonus snake | |
| 6 MANDALI SARPA *Ci* 23 124 | Indian cobra (*Naja tripudiana*) | |
| 7 PATRAGA *Ci* 23 84 | Tree snake (*Chrysopelia ornate*) | |
| 8 RAJIMAN SARPA *Ci* 23 124 | Striped snake with spots on its body | |
| 9 TAKSAKA *Ci* 23 195 | *Trimeresurus gramineus* ? | |
| **UNCLASSIFIED** | | |
| 1 AJA *Su* 2 93<br>*Syn*<br>BASTA *Sa* 25 39<br>CHĀGA *Ci* 23 77 | Goat (*Capra hircus*) | Mammal |
| 2 AVI<br>*Syn*<br>ĀVIKA *Su* 27 223<br>MEṢA *Ci* 17 116<br>URABHRA *Su* 6 43 | Sheep (*Ovis*) | |
| 3 DVIKAKUDA *C* 14 207 | Two-humped camel (*Camelus bactrianus*) | |
| 4 GANḌUPADA *Ci* 8 151 | Earthworm (*Lumbricidae*) | Annelida |
| 5 JATUKA *C* 24 48 | Lac insect (*Coccus lacca*) | Coccifera |
| 6 MADHUMAKSIKA *Su* 5 43 | Honey bee (*Apis indica*) | Hymenoptera |
| 7 MADHU BHRAMARA *Su* 27 243 | Black honey bee (*Apis dorsata*) | |
| 8 MAKṢIKĀ *C* 20 29 | House-fly (*Musca domestica*) | Diptera |
| 9 MĀNUṢA *Su* 27 224 | Man (*Homo sapiens*) | Mammal |
| 10 MAŚAKA *In* 2 21 | Mosquito (*Culicidae*) | Diptera |
| 11 MATSYAKA *Śa* 8 19 | Silver fish (*Lepisma saccharina*) | Thysanura |
| 12 PIPĪLIKĀ *Ci* 23 187 | Ant (*Formicoda*) | Hymenoptera |
| 13 RĀJAHAMSA *Su* 12 18/1 | Royal Chinese swan (*Cygnus cygnoides*) | Bird |
| 14 VASTRAKṚMI *C* 23 100 | Cloth worm (*Tinea*) | Lepidoptera |
| 15 YŪKĀ *Vi* 7, 10 | Body and head louse (*Pediculus*) | Anoplura |

TABLE 2

*Medicinal Substances of Animal Origin and their Uses*

| Name and synonyms in Caraka, with references | English equivalent | Mode of use or application | Medicinal uses in |
|---|---|---|---|
| 1 AHI *Ci* 10, 51 | Snake | Inhalation of the fumes when burnt | Epilepsy |
| 2 AHI-PURĪṢA *Ci* 10, 51 | Snake-dung | As above | Insanity |
| 3 AJĀ-KṢĪRA *Ci* 5, 133, 8, 116, 11, 50, 19, 84, 25, 40, 29, 53, 133 | Goat's milk | (*a*) External—in ointment<br>(*b*) Internal—in diet<br>(*c*) Internal—in medicated ghee<br>(*d*) Internal—as ingredient of sweetened jelly | (*a*) Inflammation<br>(*b*) Fever, enlarged spleen<br>(*c*) Debility, haemothermia, etc<br>(*d*) Blood dysentery |
| 4 AJA-MĀMSA *Ci* 11, 83, 18, 44, *Ka* 1, 28<br>*Syn*<br>CHĀGA-MĀMSA *Ci* 23, 67 | Goat's flesh | (*a*) Local application for absorption of venoms<br>(*b*) Internal—as soup in diet<br>(*c*) Internal—as ingredient of ghee<br>(*d*) Internal—the meat juice used in prescription | (*a*) Poisonous bites<br>(*b*) Wasting diseases<br>(*c*) Spleen disease, *pain in the* groin and pelvis<br>(*d*) Anaemia, fistula, internal worms |
| 5 AJA-MEDAS *Sū* 25, 38, *Ci* 11, 27 | Goat's fat | Internal—in diet | Debility |
| 6 AJĀ-MŪTRA *Sū* 1, 93, 100; *Ci* 30, 80 | Urine of the she-goat | (*a*) External—for local massage<br>(*b*) External—*in medicated oil for* local application<br>(*c*) Internal—as drink | (*a*) Diseases of the spleen and stomach, *piles*, poisonous bites<br>(*b*) Vaginal disorders<br>(*c*) Jaundice, excessive bile secretion |
| 7 AJA-RUDHIRA *Ci* 19, 74, 30, 101, *Si* 6, 82, 10, 41 | Goat's blood | (*a*) As ingredient of enema<br>(*b*) Internal—ingredient of liquid mixture | (*a*) Colic pain<br>(*b*) Dysentery, vomiting, fainting, amenorrhoea |
| 8 ĀKHU-MĀMSA *Ci* 23, *100*, 147, *26*, 175<br>*Syn*<br>MŪṢIKA-MĀMSA *Si* 12, 18/5 | Flesh of mouse and rat | (*a*) As ingredient of enema<br>(*b*) Internal—as ingredient of medicinal ghee | (*a*) Acute constipation, retention of urine<br>(*b*) Diseases of the head |
| 9 AŚVA KARĪṢA *Sū* 14, 26, 60, *Vi* 7, 22, *Ci* 14, 41, 17, 116, 130, 134 | Horse-dung | (*a*) External—as fumigant<br>(*b*) External—in poultices<br>(*c*) Internal—in decoction<br>(*d*) Internal—as *juice in mixture* | (*a*) As diaphoretic<br>(*b*) & (*c*) Piles<br>(*d*) Haemothermia, hiccup |
| 10 AŚVĀ KṢĪRA *Ci* 11, 83 | Mare's milk | As diet | Consumption |

| | | | |
|---|---|---|---|
| 11 AVI ŚONITA *Ci* 30, 101, *Si* 10, 41<br>*Syn*<br>MEṢA RAKTA *Ci* 19, 40 | Sheep's blood | (*a*) As ingredient of rectal enema<br>(*b*) Internal—in mixtures | (*a*) Haemorrhage<br>(*b*) Amenorrhoea |
| 12 AVI MŪTRA *Sū* 1, 93, 100, *Ci* 10 48, 26, 185 | Sheep's urine | (*a*) External—in nasal medication<br>(*b*) External—in eye application<br>(*c*) Internal—in infusion | (*a*) Diseases of the head<br>(*b*) Epilepsy, insanity<br>(*c*) Imbalance of the humors |
| 13 BALĀKĀ-ASTHI *Ci* 23 98 | Bones of the crane | Burnt for fumigation | As vermicide and general disinfectant |
| 14 BHUJAGAPATI ŚIRṢA *Ci* 23 99 | Hood of the king cobra | Inhalation of the fumes when burnt | Oedema, toxicosis, poisonous bites |
| 15 CAKORA *Ci* 2 1 46 3 190 23 110 *Si* 12, 19/1 | Greek partridge | (*a*) External—extract of the flesh and marrow as ingredient of nutritive enema<br>(*b*) Internal—as soup in diet | (*a*) Fever debility<br>(*b*) Debility anaemia, fevers, female diseases |
| 16 CAKORA ANḌA *Sū* 27 85 *Ci* 11 25 | Eggs of the Greek partridge | (*a*) Internal—in diet<br>(*b*) Internal—as ingredient of mixture | (*a*) Seminal weakness<br>(*b*) Profuse bleeding |
| 17 CARANĀYUDHA MĀMSA *Ci* 3 197 | Fowl's flesh | Internal in diet | Fever haemorrhage |
| 18 CĀSA *In* 12 76, *Ci* 8 150 17 118 | The blue jay | (*a*) External skin bones and feathers burnt for fumigation<br>(*b*) Internal—in diet | (*a*) Congestion of the respiratory tract<br>(*b*) Consumption |
| 19 CAṬAKA-ANḌA *Sū* 27 86 | Sparrow's egg | Internal—in diet | Seminal weakness, cough, cardiac disorders |
| 20 CAṬAKA-MĀMSA *Sū* 27, 85, *Ci* 2/2, 10, 2/4, 6, *Si* 12, 18/8, 19/1 | Flesh of the sparrow | (*a*) Ingredient of nutritive enema<br>(*b*) Internal—in diet | (*a*) Rheumatism, debility, female diseases, etc<br>(*b*) Sexual debility, general weakness |
| 21 DAKṢA ANḌA *Ci* 11, 25 | Egg of the common fowl | Internal—in diet | Profuse bleeding |
| 22. DAKṢA MALA *Ci* 25, 53<br>*Syn*<br>KUKKUṬA-SAKṚT *Ci* 14, 54 | Droppings of the common fowl | (*a*) External—local application<br>(*b*) External—in ointment | (*a*) Suppurated swellings<br>(*b*) Piles |
| 23 DAKṢA MĀMSA *Ci* 8, 66, 158, 11, 25<br>*Syn*<br>KUKKUṬA MĀMSA *Ci* 2/1, 48, 23, 67 | Flesh of the common fowl | (*a*) External—local application for absorption of venom<br>(*b*) Internal—in diet<br>(*c*) Internal—the meat juice in diet | (*a*) Poisonous bites<br>(*b*) Acute constipation, jaundice, dysentery, etc<br>(*c*) Bleeding piles, sexual debility |
| 24 DAKṢA-ŚONITA *Si* 10 41 | Blood of the common fowl | Internal—in mixture | Amenorrhoea, fainting, diarrhoea, etc |
| 25 DHĀRTARĀṢṬRA MĀMSA *Sū* 27, 85 | Flesh of the black-legged swan | Internal—as soup in diet | Seminal weakness, pulmonary weakness |

TABLE 2

*Medicinal Substances of Animal Origin and their Uses—(Contd.)*

| Name and synonyms in Caraka, with references | English equivalent | Mode of use or application | Medicinal uses in |
|---|---|---|---|
| 26 DVIKAKUDA-RASA Ci **14**, 207 | Meat-juice of the two-humped camel | Internal—in diet | Bleeding piles |
| 27 DVIŚAPHA-CARMAN, KṢURA, ŚṚṄGA Ci **17**, 118 | The skin, hooves and horns of cloven-footed animals | Inhalation of the fumes when burnt | Congestion of the respiratory tract |
| 28 EKAŚAPHA-PAYAS Sū **27**, 221 | Milk of solidungulate animals | Internal—in diet | General weakness |
| 29. ENA-MĀṂSA Sū **5**, 5, **6**, 43, **13**, 11; **15**, 7, **22**, 25, **27**, 46, 271; Śā **8**, 24; Ci **3**, 191, **4**, 41; **19**, 50; **23**, 226, **24**, 138 | Flesh of the antelope | Internal—as soup in diet | Fever, emaciation, debility, constipation, toxicosis, etc |
| 30 ENA-ŚONITA Ci **19**, 74, **30**, 101; Si **6**, 82, **10**, 41 | Blood of the antelope | (a) Ingredient of rectal enema<br>(b) Internal—in mixture | (a) Colic pain<br>(b) Amenorrhoea, nausea, fainting, collapse, etc |
| 31 GAJA-ASTHI Ci **14**, 55 | Elephant's bones | External—the powder as ingredient of ointment | Piles |
| 32 GAJA-MĀṂSA Ci **2**/2, 29, **6**, 8, 154, **9**, 82, **14**, 56; **17**, 116, **18**, 20, **23**, 119 | Elephant's flesh | Internal—in diet | Debility |
| 33 GAJAMUKTIKA Ci **23**, 252 | ? | Worn as talisman | Antidote for poisonous bites |
| 34 GAJA-ŚAKṚT Ci **17**, 116<br>*Syn* ·<br>KUÑJARA-PURĪṢA Ci **14**, 51 | Elephant's dung | (a) Inhalation of the fumes when burnt<br>(b) Internal—the aqueous extract taken with honey | (a) Epilepsy<br>(b) Increase of phlegm or bile |
| 35. GANḌUPADA Ci **8**, 151 | Earth-worms | Internal—in diet, after frying in ghee | Consumption |
| 36 GO-CARMAN Ci **9**, 49 | Cow-hide | Internal—ashes, made ingredient of medicinal ghee | Insanity |
| 37. GODHĀ-MĀṂSA Sū **2**, 33; **27**, 38, 70, Ci **7**, 88; **12**, 62; **14**, 126, **23**, 134, 186; Si **12**, 18/5 | Flesh of the iguana | (a) External—local application for absorption of venom<br>(b) Ingredient of nutritive enema<br>(c) External—the meat juice as skin lotion<br>(d) Internal—as soup in diet | (a) Poisonous bites<br>(b) Major wounds, fractures, misperistalsis<br>(c) Persistent skin diseases<br>(d) Rheumatic conditions, debility |

| | | | |
|---|---|---|---|
| 38 GO KṢĪRA *Sū* **1**, 106, *Śā* **8**, 24<br>*Syn*<br>GO PAYAS *Ci* **2/1**, 35, *etc*,<br>*Si* **10**, 41 | Cow's milk | (*a*) External—in medicated oil<br>(*b*) External—in ointment<br>(*c*) Ingredient of nutritive enema<br>(*d*) Internal—in diet<br>(*e*) Internal—in mixture<br>(*f*) Internal—in medicated ghee<br>(*g*) Internal—in linctus<br>(*h*) Internal—*ingredient of candied sweets* | (*a*) Burns, stiffness, etc<br>(*b*) Dislocation, fractures, etc<br>(*c*) Anaemia, amenorrhoea<br>(*d*) *Debility, spleen diseases*<br>(*e*) Jaundice, consumption, etc<br>(*f*) Menstrual disorders, tendency to abortion<br>(*g*) and (*h*) Heart diseases, excessive bile secretion, etc |
| 39 GO MĀMSA *Su* **5** 11, **25**, 39, etc,<br>*Ci* **6** 24, **8**, 185, *etc* | Flesh of the cow | (*a*) External—local application for absorption of venom<br>(*b*) Internal—as soup in diet | (*a*) Poisonous bites<br>(*b*) Rheumatic fevers, emaciation, consumption |
| 40 GO MŪTRA *Su* **1** 93 **3** 13, etc<br>*Vi* **8** 142, *Ci* **5** 178, etc, *Ka* **7**, 13, etc,<br>*Si* **8** 18, etc | Urine of the cow | (*a*) External—as lotion<br>(*b*) External—in ointment<br>(*c*) Internal—as drink<br>(*d*) Internal—in medicated ghee | (*a*) Skin diseases<br>(*b*) Pruritus snake-bites, etc<br>(*c*) Jaundice, leucoderma etc<br>(*d*) Insanity epilepsy, etc |
| 41 GO ŚAKṚT *Su* **14** 26 *Śa* **8** 10, *Ci* **4**, 68 **7** 57 **10** 12 **13** 130 **14** 41 **18** 91 **23** 46 48 **25**, 116 | Cow-dung | (*a*) External—burnt for fumigation<br>(*b*) External—ingredient of poultice<br>(*c*) *Internal—in medicated ghee*<br>(*d*) Internal—as aqueous extract with honey, etc | (*a*) As diaphoretic<br>(*b*) Skin lesions<br>(*c*) Piles<br>(*d*) *Piles poisoning, oedema*, spleen diseases etc |
| 42 GO SARPIS *Sū* **25**, 38, 40<br>*Ci* **2/2**, 11, **2/4**, 25 | Cow s fat | Internal—in diet | Debility, rheumatism |
| 43 GO ŚṚṄGA *Ci* **17** 79 | Cow s horns | Inhalation of the fumes when burnt | Accumulation of phlegm |
| 44 GO-SNĀYU *Ci* **17**, 79 | Cow s sinews | Inhalation of the fumes when burnt | Congestion of the respiratory tract |
| 45 GṚDHRA MĀMSA *Ci* **8** 150 **10**, 51 | Vulture s flesh | (*a*) Inhalation of the burning fumes<br>(*b*) Internal—in diet | (*a*) Insanity<br>(*b*) Consumption |
| 46 GṚDHRA PAKṢA *Ci* **10**, 51 | Wings of the vulture | Inhalation of the burning fumes | Insanity |
| 47 HAṂSA-AṆḌA *Ci* **2/1**, 49, *Si* **12**, 7, 19 | Swan's egg | Ingredient of nutritive emema | Fever, weakness, senility, gradual loss of sense perceptions |
| 48 HAṂSA-MĀMSA *Sū* **13**, 83, **27**, 41, 66, *Ci* **2/1**, 41, 48, **2/2**, 10, **6**, 24, **8**, 158 **23**, 253, **26**, 175 | Flesh of the swan | (*a*) Internal—in diet<br>(*b*) Internal—the meat juice in diet<br>(*c*) Internal—as ingredient of medicinal ghee | (*a*) Sallow complexion, emaciation<br>(*b*) General weakness<br>(*c*) Diseases of the head |
| 49 HARIṆA MĀMSA *Śa* **8**, 24,<br>*Ci* **3**, 191, **4**, 41, **14**, 201, **19**, 50, **23**, 226 | Venison | Internal—in diet | Fever, haemorrhage, diarrhoea, habitual constipation, toxic condition |

**Table 2**

*Medicinal Substances of Animal Origin and their Uses—(Contd)*

| Name and synonyms in Caraka, with references | English equivalent | Mode of use or application | Medicinal uses in |
|---|---|---|---|
| 50 HASTINĪ MŪTRA *Su* **1**, 102; *Ci* **7**, 169 | Urine of the she-elephant | (*a*) External—as lotion<br>(*b*) Internal—as drink | (*a*) Leucoderma<br>(*b*) Dermatosis, helminthiasis |
| 51 HASTINĪ PAYAS *Śā*, **27**, 223 | Elephant's milk | Internal—in diet | Debility |
| 52 JALAUKĀS *Ci* **14**, 61, **21**, 69, 119, 29 36 37 | Leech | Local application of the living creatures for blood letting | Piles, vitiated blood, rheumatism of the joints |
| 53 JAMBUKA MŪTRA, PITTA, KARĪṢA, NAKHA, CARMAN *Ci* **10**, 51 | Urine, bile, dung, nails and hide of the jackal | (*a*) Inhalation of the burning fumes<br>(*b*) External—in making ointment | (*a*) Epilepsy<br>(*b*) Insanity |
| 54 JANḌAKA CARMAN *Ci* **17**, 118 | Animal hides | (*a*) Inhalation of the burning fumes<br>(*b*) External—powdered ashes in ointment | (*a*) Hiccup<br>(*b*) Congestion of phlegm |
| 55 JATUKA VASĀ *Ci* **14**, 48 | Wax secreted by lac insects | (*a*) Inhalation of the burning fumes<br>(*b*) External—local application | (*a*) & (*b*) Piles |
| 56 JĪVAJĪVA ANḌA *Si* **12**, 19/1 | Egg of the peacock pheasant | Ingredient of nutritive enema | Debility, pectoral lesions, female diseases, recurrent fevers |
| 57 KACCHAPA RASA *Ci* **19**, 38 | Meat juice of the small tortoise | Internal—in diet | Diarrhoea |
| 58 KĀKA-MĀMSA *Ci* **8**, 151 | Crow's flesh | (*a*) Internal—in food<br>(*b*) Internal—as meat juice in liquid mixture | (*a*) Emaciation, consumption<br>(*b*) Poisonous bites |
| 59 KĀKA PURĪṢA *Ci* **10**, 51 | Crow's droppings | Inhalation of the burning fumes | Epilepsy |
| 60 KĀKA ŚONITA *Ci* **23**, 182 | Crows' blood | External—as local application | Poisonous bites |
| 61 KĀLAPUCCHAKA MĀMSA *Sū* **15**, 7, **27**, 46, *Śa* **8**, 24, *Ci* **3**, 191, **4**, 41, **19**, 50 | Flesh of the black-tailed deer | (*a*) Internal—in diet<br>(*b*) Internal—as ingredient of soup | (*a*) Fever, haemothermia, tendency to abortion<br>(*b*) Chronic diarrhoea |
| 62 KALĀVIṄKA PURĪṢA *Ci* **25**, 100 | Droppings of house sparrows | External—for local application | Non healing wounds with granulation on the surface |

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| 63 KAPIÑJALA MĀMSA *Su* **5**, 5, **6**, 43, **15**, 16, etc, *Śa* **8** 24, *Ci* **3**, 190, **4**, 41, **19**, 50, etc | Flesh of the common part ridge | (*a*) Internal—in diet<br>(*b*) Internal—meat juice used in diet | (*a*) Vitiated breast milk, tendency to abortion, etc<br>(*b*) Chronic diarrhoea, dysentery |
| 64 KAPOTA MĀMSA *Su* **26**, 84, **27**, 52, 73, *Ci* **4** 41, **23**, 203, 208 | Flesh of the pigeon | Internal—in diet | Excessive urination, haemothermia |
| 65 KAPOTA PURĪṢA *Ci* **23**, 207 208 **25**, 53 100 | Pigeon's droppings | External—for local application | Poisonous bites, suppurations, granulated non healing wounds |
| 66 KĀRANḌA ANḌA *Su* **27** 41, *Si* **12**, 19/2 | Duck's egg | Ingredient of nutritive enema | Sexual debility, pectoral lesion, spleen diseases female disorder |
| 67 KARKAṬAKA RASA *Si* **12** 18/7 | Crab-meat juice | Ingredient of nutritive enema | Sexual debility |
| 68 KHANGA MĀMSA *Su* **27** 39 84 *Śa* **8** 62 *Ci* **8** 154 | Rhinoceros flesh | Internal—in diet | Emaciation pallor etc |
| 69 KHARA ASTHI *Su* **27** 35 *Śa* **8** 34 41 *Ci* **6** 24 **7** 168 | Bones of the ass | External—the ashes as ingredient of ointment | Leucoderma |
| 70 KHARA KARĪṢA *Su* **14** 26 60 *Ci* **14** 41 **17** 116 | Ass's dung | (*a*) Inhalation of the fumes when burnt<br>(*b*) External—in ointment<br>(*c*) Internal—in infusion with honey | (*a*) As diaphoretic<br>(*b*) Piles<br>(*c*) Hiccup *congestion of phlegm* |
| 71 KHARA MĀMSA *Ci* **8** 158 | Ass's flesh | Internal—in diet | Emaciation |
| 72 KHARA MŪTRA *Su* **1** 104 | Ass's urine | Internal—as drink | Epilepsy insanity |
| 73 KRAKARA MĀMSA *Su* **27** 49 *Ci* **4** 50 | Snipe's flesh | Internal—in diet | Haemothermia |
| 74 KRAVYĀDA MĀMSA *Su* **22** 57 | Flesh of carnivorous animals | Internal—in diet | Consumption, piles |
| 75 KṚṢNASARPA VASĀ *Ci* **14** 48 **26** 259 | Fat of the cobra | (*a*) Inhalation of the fumes when burnt<br>(*b*) External—as local application | (*a*) Piles<br>(*b*) Eye-diseases |
| 76 KṢAUDRA *Sū* **6** 39 **7** 61 etc *Vi* **7** 32, *Ci* **1**/**1**, **4**, 51, **1**/**2** 4, etc | Honey | (*a*) Internal—as an adjunct in *many medicinal prescriptions*<br>(*b*) Internal—in diet | (*a*) & (*b*) All diseased and weak *conditions* |
| 77 KUKKUṬA ANḌAKAPĀLA *Ci* **26** 253 | Shell of the hen's egg | External—as ingredient of ointment | Diseases of the vision, defects of the palate |
| 78 KULINGA ANḌA *Si* **12** 19/1 | Sparrow's egg | Ingredient of nutritive enema | As in Jivajiva anda (No 56) |
| 79 KUÑJARA NAKHA *Ci* **10** 40 | Elephant's nail | Inhalation of the fumes when burnt | Epilepsy |

TABLE 2

*Medicinal Substances of Animal Origin and their Uses—(Contd.)*

| Name and synonyms in Caraka, with references | English equivalent | Mode of use or application | Medicinal uses in |
|---|---|---|---|
| 80 KURAṄGA RASA *Sū* 27, 45; *Śa*, 8, 24, *Ci* 3, 19 | Meat juice of the antelope | Internal—in diet | Tendency to abortion in pregnancy, fever |
| 81 KURARA MŪTRA, NAKHA, PITTA, PURĪṢA, CAÑCU, PAKṢA, *Ci* 17, 118 | Urine, nails, bile, droppings, beak and feathers of the osprey | (*a*) Inhalation of the fumes when burnt<br>(*b*) External—ashes as ingredient of ointment | (*a*) & (*b*) Piles |
| 82 KŪRMA RASA *Sū* 27, 40, 84, *Ci* 5, 169, 14, 129 | Meat juice of the large tortoise | Internal—in diet | Flatulence, rheumatism, etc. |
| 83 KŪRMA VASĀ *Ci* 28, 128 | Fat of the tortoise | External—as nasal medication | Flatulence, rheumatism, etc. |
| 84 LĀKṢĀ (JATU) *Ci* 9, 61, 11, 15, etc | Lac | (*a*) As fumigator<br>(*b*) Ingredient of cigars<br>(*c*) Internal—in mixed decoction<br>(*d*) Internal—in linctus<br>(*e*) Internal—in medicated ghee<br>(*f*) Internal—in pills | (*a*) As insecticide and vermicide<br>(*b*) Hiccup, deep-seated phlegm<br>(*c*) Ulcers and lesions of the thoracic cavity, dysuria, lithiasis, etc<br>(*d*) & (*e*) *Toxicosis, skin eruptions*, eye diseases, defects of vision, mouth diseases, fistula, etc<br>(*f*) Loss of skin pigment |
| 85 LAVA-MĀṂSA *Sū* 5, 5, 6, 25, etc, *Śā* 8, 24, *Ci* 3, 190, 4, 41, etc | Flesh of the bustard quail | (*a*) Internal—in diet<br>(*b*) Internal—the meat juice as ingredient of soup | (*a*) Consumption, haemorrhage, tendency to abortion, etc<br>(*b*) Acute alcoholism, cardiac and pulmonary diseases, haemoptysis, chronic diarrhoea, etc |
| 86 LOPĀKA MĀṂSA *Sū* 27, 36, *Ci* 14, 126, 207<br>*Syn*<br>ŚṚGĀLA-MĀṂSA *Ci* 8, 152 | Flesh of the fox | (*a*) Internal—in diet<br>(*b*) Internal—the meat juice in diet | (*a*) Consumption, emaciation<br>(*b*) Bleeding piles |
| 87 MADHŪCCHIṢṬA *Sū* 3, 16, *Ci* 7, 121, 11, 17, etc | Bee's wax | (*a*) Inhalation of burning fumes<br>(*b*) As medium in cauterization<br>(*c*) External—in ointment<br>(*d*) External—in medicinal oil for massage<br>(*e*) Internal—in mixture<br>(*f*) Internal—in medicated ghee | (*a*) Cough, coryza, hiccup, etc.<br>(*b*) Deep-seated pus<br>(*c*) Dermatosis, painful wounds<br>(*d*) Rheumatic pain in joints, fractures and dislocations<br>(*e*) Pain in hypogastric region<br>(*f*) Biliousness, haemothermia, etc |

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|---|---|---|---|
| 88 MAHIṢA MĀṂSA *Ci* **2/1**, 42, **8**, 158, etc, *Si* **12**, 19/2 | Buffalo-meat | (*a*) The meat juice as ingredient of nutritive enema<br>(*b*) *Internal—in* diet<br>(*c*) Internal—the meat juice in diet | (*a*) Debility, senile decay, *female* diseases, etc<br>(*b*) Consumption, emaciation<br>(*c*) Sexual debility |
| 89 MAHIṢA ŚONITA *Si* **10**, 41 | Buffalo-blood | Ingredient of nutritive enema | Haemorrhage |
| 90 MAHIṢĪ DADHI *Ci* **26**, 88 | Curds from buffalo s milk | Internal—in medicated ghee | Cough, hiccup, anaemia, jaundice, etc |
| 91 MAHIṢĪ KṢĪRA *Su* **25**, 40 **27**, 219, *Ci* **11**, 83, **12** 26 etc, *Si* **10** 40, **12**, 19/1 | Buffalo s milk | (*a*) *Ingredient of nutritive enema*<br>(*b*) Internal—to be taken with cow s urine<br>(*c*) Internal—in medicated ghee<br>(*d*) Internal—in diet | (*a*) Seminal weakness, recurrent fever, senile decay, female disorders, etc<br>(*b*) Oedema<br>(*c*) Consumptive cough<br>(*d*) Insomnia, cough |
| 92 MAHIṢĪ MŪTRA *Su* **1** 102 *Ci* **13** *151* **15** *181* | Urine of the she buffalo | (*a*) Internal—ingredient of liquid mixture<br>(*b*) Internal—powder prepared by mixing the urine with plants, followed by incineration | (*a*) Piles oedema, abdominal diseases<br>(*b*) Loss of appetite |
| 93 MAHIṢĪ GHṚTA *Ci* **4** 101 **16**, 53 134 **23** 241 | Buffalo-ghee | (*a*) External—ingredient of nasal application<br>(*b*) Internal—ingredient of medicated ghee | (*a*) Bleeding from the nose<br>(*b*) Poisonous bites, jaundice, etc |
| 94 MĀKṢIKA MADHU *Su* **5** 43, **27**, 243 etc *Ci* **4**, 83, **11**, 20, etc | Bee s honey | (*a*) External—for local application with other ingredients<br>(*b*) Internal—as an adjunct to many prescriptions | (*a*) Mouth diseases sore throat<br>(*b*) In various diseases |
| 95 MAKṢIKĀ VIṢṬHĀ *Ci* **17**, 132, **30**, 325 | Droppings of the house fly | (*a*) External—in nasal errhine<br>(*b*) Internal—as pill | (*a*) Hiccup<br>(*b*) Vomiting |
| 96 MĀRJĀRA MĀṂSA *Si* **12**, 18/5 | Cat s flesh | The meat juice as ingredient of nutritive enema | Debility, broken ribs, misperistalsis retention of urine, etc |
| 97 MĀRJĀRA NAKHA PITTA CARMAN, LOMAN MŪTRA, PURĪṢA *Ci* **9** 75 **10** 41 | Nails, bile *skin fur* urine, and droppings of the cat | (*a*) Inhalation of the fumes<br>(*b*) External—the ashes as ingredient of eye-ointment<br>(*c*) *External—in nasal medication* | (*a*) & (*b*) Insanity<br>(*c*) Epilepsy, insanity |
| 98 MATSYA ĀMIṢA *Su* **3** 19, **5**, 11, etc, *Ci* **17**, 74 **24** *124, etc* | Flesh of fishes | (*a*) External—as warm poultice<br>(*b*) External—the *flesh* juice as ingredient of medicated oil | (*a*) & (*b*) Rheumatic conditions<br>(*c*) *Indigestion intestinal worms,* debility |

## TABLE 2

*Medicinal Substances of Animal Origin and their Uses—(Contd.)*

| Name and synonyms in Caraka, with references | English equivalent | Mode of use or application | Medicinal uses in |
|---|---|---|---|
| 99 MATSYA-VASĀ *Ci* 25, 76, 28, 128 | Fish oil | (*a*) External—in nasal medication<br>(*b*) Internal—as ingredient of jellied sweets | (*a*) Debility<br>(*b*) Painful wounds |
| 100 MATSYA PITTA *Ci* 30, 103 | Fish bile | External—for local application | Vaginal tumours |
| 101 MAYŪRA-MĀMSA *Su* 13, 83, *Ci* 4, 50, 5, 110, 10, 39, 12, 62, etc<br>*Syn*<br>ŚIKHI-MĀMSA *Sū* 27, 58, *Śa* 8, 28<br>BARHI-MĀMSA *Ci* 8, 150 | Flesh of the peacock | (*a*) The meat juice as ingredient of nutritive enema<br>(*b*) External—local application for absorption of venom<br>(*c*) External—in nasal medication<br>(*d*) Internal—in diet<br>(*e*) Internal—the meat juice in mixture | (*a*) Debility, rheumatism of the lower body<br>(*b*) Poisonous bites<br>(*c*) Heart disease, facial paralysis, ear, nose and throat diseases<br>(*d*) Emaciation, seminal weakness, consumption, etc<br>(*e*) Oedema, diarrhoea, cardiac troubles, retarded development of the foetus |
| 102 MAYŪRA-BARHA *Ci* 23, 98 | Peacock's feathers | Burnt for fumigation | As vermicide, insecticide, and general disinfectant |
| 103 MAYŪRA PĀDANĀLA *Ci* 17, 117 | Talons of the peacock | Internal—the burnt ashes as ingredient of linctus | Hiccup, congestion of phlegm |
| 104 MEṢA ŚAKṚT *Ci* 17, 116 | Dung of the ram | Internal—in aqueous infusion with honey | Hiccup, congestion of phlegm |
| 105 MṚGA RASA *Ci* 19, 73, *Ka* 12, 8, *Si* 12, 18/10 | Meat juice of herbivorous forest animals | (*a*) Ingredient of nutritive enema<br>(*b*) Internal—ingredient of soup | (*a*) Rheumatism of the lower limbs and organs<br>(*b*) Enlarged spleen, dysentery |
| 106 MUKTĀ *Ci* 17, 125 | Pearl | Internal—powdered and made into linctus | Hiccup, cough |
| 107 NAKULA-MĀMSA *Ci* 8, 152, *Si* 12, 18/5 | Flesh of the mongoose | (*a*) Ingredient of nutritive enema<br>(*b*) Internal—in diet | (*a*) Sexual debility<br>(*b*) Consumption |
| 108 NAKULA-PURĪṢA *Ci* 10, 51 | Dung of the mongoose | Inhalation of the fumes when burnt | Epilepsy, insanity |
| 109 NAKRA ANḌA *Ci* 2/2, 28 | Crocodile egg | Internal—as ingredient of sweetened pancakes | Seminal weakness, sexual debility |

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| 110 NAKRA RETAS *Ci* **2/1**, 48 | The sperm of the crocodile | Internal—in diet, cooked with fowl's flesh | As a powerful aphrodisiac |
| 111 NAKRA VASĀ *Ci* **28**, 128 | Crocodile fat | External—in nasal medication | Rheumatism of the joints |
| 112 NĀRĪ KṢĪRA *Sū* **27**, 224 *Ci* **15** 230 **17**, 131, **22**, 23 | Human milk | (*a*) External—as ingredient of nasal medication<br>(*b*) External—in eye-ointment<br>(*c*) Internal—in diet | (*a*) Haemothermia, hiccup, excessive thirst<br>(*b*) *Opthalmia*<br>(*c*) Excessive hunger, emaciation, debility |
| 113 PĀṆḌAVIKA MĀṂSA *Sū* **17**, 56 | Flesh of the wood pigeon | Internal—in diet | Debility, emaciation |
| 114 PĀRĀVATA RASA *Ci* **4**, 41, **19**, 72, **22**, 29 | Meat juice of the dove | Internal—in diet | Haemothermia, excessive thirst, dysentery |
| 115 PĀRĀVATA-ŚAKṚT *Ci* **14**, 55 | *Droppings of the dove* | External—in ointment | Piles |
| 116 PIPĪLIKĀ *Ci* **13**, 187 | Ants of the big black species | Surgical use (vide text, p 24) | Intestinal perforation |
| 117 PLAVA ASTHI *Ci* **26**, 246 | Bones of the pelican | External—the ashes as ingredient of eye-ointment | Eye diseases |
| 118 PRASAHA KṢĪRA *Ci* **29**, 137 | Milk of the tearer group of animals (vide Table 1) | External—as ingredient of poultice | Stiffness cramps pricking pain, swelling |
| 119 PRASAHA MĀṂSA *Ci* **8**, *160* **15**, *210* **18**, 156 **24**, 124 | *Flesh of the tearer group of* animals | (*a*) *External—as poultice*<br>(*b*) Internal—in diet<br>(*c*) Internal—the meat juice as diet | (*a*) Stiffness cramps pricking pain swelling<br>(*b*) Indigestion loss of appetite, consumption<br>(*c*) Painful oedema of the groin and buttocks |
| 120 PRATUDA MĀṂSA *Ci* **6**, 16 **8**, 161 185 **29**, 50 | Flesh of the pecker group of birds (Table 1) | (*a*) Internal—in diet<br>(*b*) Internal—the meat juice as diet | (*a*) Consumption<br>(*b*) Urinary disorders, rheumatism etc |
| 121 PRATUDA VASĀ *Ci* **29**, 74 | Fat of the pecker group of birds | External—as ingredient of medicated ghee | Rheumatism |
| 122 PRAVĀLA (VIDRUMA) *Ci* **1/1**, 58, **1/4**, 22 **17**, 125 **26**, 56 246 | Coral | (*a*) External—powdered and used in medicated ghee<br>(*b*) External—powdered and used in eye-ointment<br>(*c*) Internal—as infusion of the powder in rice water<br>(*d*) Internal—the powder made into linctus | (*a*) Acute spreading inflammation<br>(*b*) Eye-diseases<br>(*c*) Dysuria<br>(*d*) Hiccup cough |
| 123 PṚṢAD-RASA *Ci* **3**, 191 | Meat juice of the spotted deer | (*a*) Ingredient of nutritive enema<br>(*b*) Internal—in diet | (*a*) As in Jīvajīva aṇḍa (56)<br>(*b*) Fever toxicosis |

TABLE 2

*Medicinal Substances of Animal Origin and their Uses—(Contd )*

| | Name and synonyms in Caraka, with references | English equivalent | Mode of use or application | Medicinal uses in |
|---|---|---|---|---|
| 124 | RĀJAHAMSA RASA Si 12, 18/1 | Meat juice of the swan | Ingredient of nutritive enema | Weakness, oligospermia, sexual debility |
| 125 | ṚKṢA MĀMSA Ci 8, 153 | Bear s flesh | Internal—in diet | Consumption |
| 126 | ṚKṢA VASĀ Ci 26, 47 30, 112 | Bear's fat | (a) External—local application<br>(b) Internal—used in decoction | (a) Prolapsed uterus<br>(b) Dysuria |
| 127 | ROHITA ĀMIṢA Ci 2/4, 18 Si 12, 18/4 | Flesh of the red carp fish | Internal—in diet | Indigestion, weakness, sexual debility |
| 128 | ROHITA PITTA Ci 23, 183 | Bile of the red carp fish | External—as ingredient of eye ointment | Poisonous bites in the region of the eyes |
| 129 | ŚALLAKA CARMAN LOMAN MŪTRA, NAKHA, PITTA, ŚAKṚT Ci 9, 75 | The hide, fur, urine, nails, *bile, and droppings* of the porcupine | (a) Inhalation of the fumes when burnt<br>(b) External—the ashes as ingredient of ointment | (a) Insanity<br>(b) Epilepsy |
| 130 | ŚALLAKA ASTHI Ci 17, 117 | Bones and quills of the porcupine | Internal—the ashes as ingredient of linctus | Severe hiccup |
| 131 | ŚALLAKA MĀMSA Sū 27, 71 Ci 17, 112 | Flesh of the porcupine | (a) The meat juice as ingredient of nutritive enema<br>(b) Internal—in diet<br>(c) Internal—the meat juice in liquid mixture | (a) Severe injuries, fracture, uraemia, constipation<br>(b) Loss of appetite, congestion of phlegm etc<br>(c) Flatulence, rheumatism |
| 132 | SAMBHARA MĀMSA Sū 27, 46 Śā 8, 24 | Flesh of the sambhara deer | Internal—in diet | Tendency to abortion in pregnancy |
| 133 | ŚAṄKHA CŪRṆA Sū 27, 40, Ci 3, 262, 4, 79 etc | Conch shell powder | (a) External in ointment<br>(b) External—in poultice<br>(c) Internal—in linctus | (a) Persistent skin diseases<br>(b) Eye-diseases<br>(c) Cough, hiccup |
| 134 | ŚAPHARĪ Ci 2 4 17 | A *kind of small fish* | Internal—in diet | Sexual debility |
| 135 | SĀRASA AṆḌA Si 12, 17, 19/2 | Crane s egg | Ingredient of nutritive enema | Seminal weakness, debility |
| 136. | SĀRASA ASTHI Ci 26, 55 | Bones of the crane | Internal—powdered and used as ingredient of medicine | Dysuria |
| 137 | SARPA NIRMOKA Ci 14, 49 | Cast-off slough of the snake | Inhalation of the fumes when burnt | Piles |

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| 138 ŚAŚA MĀMSA *Su* **15** 7 **27**, 45, 76, *Śā* **8** 24, *Ci* **3** 191, **4** 41 **26**, 175, etc | Flesh of the rabbit or hare | (*a*) Internal—in diet (*b*) Internal—the meat juice used in medicated ghee | (*a*) Fever, mild rheumatism, alcoholism, haemothermia (*b*) Diseases of the head |
| 139 ŚIKHI AṆḌA *Si* **12**, 17 19/1, 24 Syn BARHI AṆḌA *Ci* **2/1**, 49 | Egg of the pea hen | *a*) Ingredient of nutritive enema (*b*) Internal in diet | (*a*) As in Jivajiva anda (6) (*b*) Seminal weakness |
| 140 ŚIKHI PADA *Ci* **18**, 170 | Peacock's claws | Internal the ashes as ingredient of medicated ghee | Hiccup cough |
| 141 ŚIKHI PITTA *Ci* **7** 170 **23**, 51 217 | Peacock's bile | *a* External in ointment (*b* Internal in pills *c* Internal in medicated ghee | (*a*) Leucoderma (*b*) Poisoning (*c*) Poisonous bites |
| 142 SIMHA MĀMSA *Ci* **8**, 153 | Flesh of the lion | Internal as diet | Consumption |
| 143 SIMHA MŪTRA *Ci* **10**, 41 | Urine of the lion | External as nasal medication | Epilepsy |
| 144 SIMHA VASĀ *Ci* **3**, 306 | Lion's fat | Internal in medicated ghee | Recurrent fever |
| 145 ŚṚGĀLA MŪTRA *Ci* **10**, 41 | Jackal's urine | External in nasal medication | Epilepsy |
| 146 ŚṚGĀLA PITTA *Ci* **9**, 97 | Bile of the jackal | External ingredient of eye-ointment | Eye diseases |
| 147 SŪKARA MĀMSA *Ci* **17**, 74 | Pork | Internal in diet as soup | Hiccup |
| 148 ŚVA MŪTRA *Ci* **10**, 41 | Dog's urine | External—as nasal medication | Epilepsy |
| 149 ŚVA PITTA *Ci* **10**, 50 | Dog's bile | Inhalation of the fumes when burnt | Epilepsy |
| 150 ŚVĀVIT MĀMSA *Ci* **14**, 126, **17**, 112 | Flesh of the pangolin | Internal—in diet | Hiccup rheumatism |
| 151 ŚYENA RASA *Su* **27**, 36 | Meat juice of the hawk | Internal—in diet | For proper growth of the foetus |
| 152 TĀMRACŪḌA RASA *Si* **2**, 32, *Śā* **8**, 28 | Meat juice of the red-crested cock | Internal—in diet | Diseases of the urethral passage, abnormal growth of the foetus |
| 153 TARAKṢU MĀMSA *Ci* **8**, 153, *Si* **12**, 19/1 | Flesh of the hyena | (*a*) Ingredient of nutritive enema (*b*) Internal—in diet | (*a*) As in Jivajiva anda (56) (*b*) Consumption |
| 154 TITTIRI MĀMSA *Śā* **8**, 28, *Ci* **2/1**, 41, **11**, 70 etc | Flesh of the grey partridge | (*a*) Internal—as ingredient of sweetened jelly (*b*) Internal—in diet | (*a*) Rheumatism, emaciation, menstrual disorders, sterility in women (*b*) Constipation, piles, jaundice, etc |

7

TABLE 2

*Medicinal Substances of Animal Origin and their Uses—(Contd.)*

| Name and synonyms in Caraka, with references | English equivalent | Mode of use or application | Medicinal uses in |
|---|---|---|---|
| 155 ULŪKA-CARMAN, MŪTRA, NAKHA, PURĪṢA, PITTA Ci 9, 75 | Skin, urine, nails, dung and bile of the owl | (a) Inhalation of the fumes when burnt<br>(b) External—prepared for local application | (a) & (b) Insanity |
| 156 ULŪKA-MĀMSA Ci 8, 150 | Flesh of the owl | Internal—in diet | Consumption |
| 157 UṢTRA KARĪṢA Sū 14, 26; Ci 17, 116 | Camel-dung | Burnt for fumigation | As a diaphoretic |
| 158 UṢTRA-MĀMSA Ci 8, 158, 14, 126 | Flesh of the camel | Internal—in diet | Emaciation, flatulence |
| 159 UṢTRA-MŪTRA Sū 1, 103 | Camel's urine | Internal—as drink | Hiccup, cough, piles |
| 160 UṢTRA-VASĀ Ci 14, 48 | Camel's fat | (a) Inhalation of the fumes when burnt<br>(b) External—for local application | (a) & (b) Piles |
| 161 UṢṬRĪ-PAYAS Ci. 13, 107, 183, 22, 23 | Camel's milk | (a) Internal—to be used as exclusive diet for one month<br>(b) Internal—in diet | (a) Oedema<br>(b) Constipation, colic pain, debility, etc |
| 162. VASTĀ-CARMAN, MŪTRA, NAKHA, PURĪṢA, PITTA Ci 9, 75 | Hide, urine, nails, dung and bile of the she-goat | (a) Inhalation of the fumes when burnt<br>(b) External—prepared for local application | (a) & (b) Insanity |
| 163 VASTA-MŪTRA Ci 9, 71, 10, 26, etc | Urine of the he-goat | (a) External—in ointment<br>(b) External—in nasal medication<br>(c) External—in eye-ointment<br>(d) Internal—in medicated ghee | (a) Epilepsy, toxicosis, piles, vaginitis, cervicitis<br>(b) Insanity<br>(c) Dimness of vision, infection and discharge of pus<br>(d) Cardiac seizures |
| 164 VARĀHA-MĀMSA Sū 27, 78; Ci 2/4, 11, 18, 80 | Hog's flesh | Internal—in diet | Emaciation, loss of appetite, neuralgia, sexual debility |
| 165. VARĀHA-PITTA Ci. 5, 175 | Hog's bile | External—for local application | Tumour inside the vaginal passage |
| 166. VARĀHA-ŚOṆITA Ci. 7, 122; 30, 110 | Hog's blood | (a) External—as skin lotion<br>(b) Internal—as ingredient of acidulated drink | (a) Cutaneous eruptions<br>(b) Amenorrhoea |

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| 167 VARĀHA ŚAKṚT Ci 14, 51, 17, 116 | Hog's dung | (a) Inhalation of the fumes when burnt<br>(b) Internal—the aqurous extract in linctus | (a) Piles<br>(b) Hiccup deep-seated phelgm |
| 168 VARĀHA VṚṢAṆA Si 12, 18/8 | Hog's testes | Ingredient of nutritive enema | Sexual debility |
| 169 VARTAKA MĀMSA Su 27, 48, Ci 4, 41, 250 5, 110, etc | Flesh of the button-quail | Internal in diet | Flatulence, enlarged spleen, haemothermia |
| 170 VIṢKIRA MĀMSA Su 27, 48, Ci 6, 19, 8, 161 etc | Flesh of the gallinaceous birds (Table 1) | (a Ingredient of nutritive enema<br>(b) Internal in diet | (a) Sexual debility, dysuria<br>(b) Rheumatic conditions, excessive bile secretion, etc |
| 171 VṚKA CARMAN MŪTRA, NAKHA, PITTA ŚAKṚT Ci 9, 75 | Hide urine nails dung and bile of the wolf | (a) Inhalation of the fumes when burnt<br>(b External prepared for local application | (a) & (b) Insanity |
| 172 VIṢADAṂŚA VASĀ Ci 14, 48 | Fat of the animals of the feline species | (a) Inhalation of the fumes when burnt<br>(b) External -as local application | (a) & (b) Piles |
| 173 VIṢADAṂŚA CARMAN Ci 14, 49 | Hides of animals of the feline species | External for local application of the fumes when burnt | Piles |
| 174 VṚṢA RASA Si 12, 18/6 | Meat juice of the bull | Ingredient of nutritive enema | Sexual debility |
| 175 VṚṢA VṚṢAṆA Si 12, 18/2 | Testes of the bull | Ingredient of nutritive enema | Sexual debility |
| 176 VYĀGHRA MĀMSA Ci 8, 153 | Flesh of the tiger | Internal—in diet | Consumption |
| 177 VYĀGHRA-VASĀ Ci 3, 305 | Tiger's fat | External—as nasal medication | Recurrent fevers |

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| 13 ĀMRA *Su* 2 28, etc<br>*Syn* Sahakara | Mango tree<br>*Mangifera indica* Linn | The fresh fruit used alone with other substances (internal), the powdered stone (external) | Assimilation disorders, etc, the stone used for restoring normal colour of skin |
| 14 ĀMRATAKA *Ci* 22, 35, etc<br>*Syn* Śṛngi | Hog plum tree<br>*Spondias mangifera* Willd | The fruits as ingredient of sweet jelly | Fainting, neuralgia, painful piles, cardiac disorders, etc |
| 15 ANKOṬA *Su* 27 159, etc<br>*Syn* Ankola Nikocaka | Alangy<br>*Alangium lamarckii* Thw | The fruit as ingredient of medicated ghee | Chronic poisoning epilepsy, etc. |
| 16 APĀMĀRGA *Su* 2, 3 etc<br>*Syn* Pratyakpuspī Śaikhar ka, Mayuraka | Rough chaff tree<br>*Achyranthes aspera* Linn | The dried fruits alone or in prescriptions (internal) | Parasitic infection of the head, hemicrania, as errhine |
| 17 ĀRAGVADHĀ *Su* 1 83, etc<br>*Syn* Caturāngula Krtamala Karnikara, Sampaka Prāgraha Rajavṛksa | Indian labarnum<br>*Cassia fistula* Linn | The sap, root, bark and leaves used in prescriptions (internal) | Misperistalsis in infants and in chronic skin affections, as diuretic and purgative |
| 18 ĀRDRAKA *Vi* 8 142 etc<br>*Syn* Śrngavera Visvabhesaja Nagara | Ginger tree<br>*Zingiber officinale* Rosc | The dried tubers used as spice or in prescriptions (internal) | Abdominal diseases indigestion, consumption, etc |
| 19 ARIMEDA *Vi* 8, 144 etc | White babool tree<br>*Acacia leucophloea* Willd. | The bark or pith used in decoctions (external) | *Dental and oral diseases* |
| 20 ARJAKA *Su* 14 32 etc<br>*Syn* Kalamalaka Kuṭareka Sumukhā, Phanijjaka | Shrubby basil<br>*Ocimum gratissimum* Linn | The pulp or juice of the leaves used in prescriptions (external) | Skin infections, oedema, etc |
| 21 ARJUNA *Ci* 8, 129 etc<br>*Syn* Dhananjaya, Kakubha | Arjun tree<br>*Terminalia arjuna* Bedd | The bark and leaves used in prescriptions (internal) | Diarrhoea, ulcers, cardiac disorders, etc |
| 22 ARKA *Ci* 23, 56 | Madar tree<br>*Calotropis gigantia* R Br | Milky exudations from the bark used *in prescriptions (external)* | Poisoning, bites, wounds, etc, as *laxative* |
| 23 ARUKA *Su* 25, 39, etc<br>*Syn* Āluka | Peach tree<br>*Prunus persica* Linn | The fruits taken alone | Tonic food |
| 24 ASANA *Su* 25, 49 etc<br>*Syn* Bijaka, Priyaka | *Terminalia tomentosa* Bed | A decoction of the bark used in prescriptions (internal) | Rheumatism fever, urinary diseases, etc |
| 25 AŚMANTAKA *Su* 1 114 etc<br>*Syn* Ambuda, Kovidara | Ebony tree<br>*Diospyros montana* | A decoction of the leaves (internal) | Piles diseases of the head, as emetic, purgative, etc |
| 26 AŚOKA *Su* 4, 18/2 | Asoka tree<br>*Saraca indica* Linn | A decoction of the flowering buds and seeds in prescriptions (internal) | Haemothermia haemorrhage, as sedative, purgative, etc |
| 27 AŚVAGANDHĀ *Su* 3, 8, etc.<br>*Syn* Aśvāvarohikā, Kaṭṭaka, Kakoli | Winter cherry<br>*Withania somnifera* Dunal | The leaves and roots used as ingredients of medicinal oil or ghee | Skin diseases, hiccup, consumption, etc |
| 28 AŚVATTHA *Su* 25, 49, etc.<br>*Syn.* Bodhivṛkṣa, Sebya, Gajabhakṣa, Kṣ radruma | Sacred fig<br>*Ficus religiosa* Linn | The tender roots or the bark, in paste form (internal and external) | Skin infections, wounds etc, as *roborant* and purgative |

TABLE 3

*Medicinal Plants and Plant Products and their Uses—(Contd.)*

| Name in Caraka reference, and synonyms if any | Modern and botanical names | Mode of use | Medicinal uses in |
|---|---|---|---|
| 29 ATASĪ G 8, 176 etc. Syn Haimavatī, Umā, Masṛṇā | Linseed tree, flax *Linum usitatissimum* Linn. | The decoction of the seeds and leaves used in prescriptions (internal) | Urinary diseases, anaemia, consumption, etc |
| 30. ATIBALĀ G 3, 267, etc Syn. Vāṭyāyanī, Vāṭyapuṣpī | Indian sida *Sida rhombifolia* Linn | Extract of entire plant used in prescriptions (internal) | Fevers, loss of vitality, rheumatic conditions, etc. |
| 31 ATIVIṢĀ G 3, 201, etc Syn Mahauṣadhā, Prativiṣā, Śuklakāṇḍā, Śvetā | Indian aconite *Aconitum heterophyllum* Wall | The root and tuber used in prescriptions (internal) | Dysuria, fever, leucoderma, obesity, diarrhoea, etc |
| 32 ĀTMAGUPTĀ G 18, 76, etc Syn Adhugandhā, Ajaḍā, Kacchurā, Kapikacchu, Lāṅgulī, Ṛṣabhī, Ṛṣyaproktā, Svaguptā, Śyāmaguptā | Cowage plant *Mucuna pruriens* De | The decoction of the root and seeds as ingredients of medicated ghee, etc | Cough, muscular stiffness, facial paralysis, general weakness, etc |
| 33 AVĀKAPUṢPĪ G 7, 114, etc. Syn. Aticchatrā, Chatrā, Karavī, Śatapuṣpā | Indian borage *Trichodesma indicum* R Br | Extract of the leaves in oil as ingredient of medicated ghee | Leprosy, dermatosis, piles, etc |
| 34 BADARĪ G 14, 214, etc Syn. Badara, Kuvala, Sauvīra, Phenila | Jujuba fruit tree *Zizyphus jujuba* Linn | A sweetened decoction of the leaves used in prescriptions (internal) | Piles, loss of voice, giddiness, etc |
| 35. BAKULA Fr 7, 21, etc. Syn. Kesara, Siṃhakesara, Sthirā, Kumumā, Viśārada, Dhanvī, Madhupuṣpā | Bakula tree *Mimusops elengi* Linn | Extract of the bark and root with honey, or in medicated ghee | Helminthiasis, fever |
| 36. BALĀ Su 2, 13, etc Syn Sumaṅgā, Kharayaṣṭikā, Balinī, Jayantī, Bhadrabalā, Bhadraudanī | Heart leaf sida *Sida cordifolia* Linn | Decoction of the leaves used in prescriptions (internal) | Constipation, splenic disorders, for rejuvenation and for inducing conception |
| 37 BHADRAMUSTĀ G 24, 145, etc Syn. Kuruvinda | Nut grass *Cyperus tuberosus* Roth | Decoction of the roots used in prescriptions (internal) | Cough, spitting of blood, etc |
| 38. BHALLĀTAKA Si 3, 5, etc. Syn Bhallāta, Bhallātakī, Śailabīja, Aruṣkara | Marking nut tree *Semecarpus anacardium* Linn | Decoction of the nuts used in prescriptions (internal and external) | Obstinate skin diseases, poisoning, as vitalizer and for rejuvenation |
| 39 BHĀRADVĀJĪ G 4 B 2, etc Syn Vanakārpāsa | Devil's cotton tree *Abroma augusta* Linn | Infusion of the leaves and roots used in prescriptions (internal and external) | Debility, female diseases, amenorrhoea, etc |

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| 40 BHĀRGĪ *Ci* 3 211, etc *Syn* Angāravallī, Phañji, Brahmayaṣṭhī, Bharangi | *Clerodendron serratum* | The roots used alone or as ingredient of *medicinal oil* | Cough, fevers, hard cutaneous *eruptions, etc.* |
| 41 BHAVYA *Ci* 24, 136 etc *Syn* Bhava | Indian dillenia *Dillenia indica* Linn | Extract of fruit as ingredient of medicinal ghee | Urinary calculus, retention of urine, paralysis, etc |
| 42 BHṚṄGARĀJA *Ci* 18, 117, etc *Syn* Bhṛṅga, Bhṛṅgaraka Bhṛṅgara | Trailing eclipta *Wedelia calendulacea* Less | The plant juice taken with honey | Cough, grey hairs and senility |
| 43 BHŪRJA *Su* 3, 4, etc *Syn* Bhurjapatra Citratvak Bhuja Carmi | Bhojapatra tree *Betula bhojapatra* Wall | The nodes and bark compounded into ointment | Ringworm, acute spreading suppurations, ulcers |
| *44 VIBHĪTAKA *Su* 4, 13, etc. *Syn* Aksa, Vibhitaki Tusa Vibhita Kamaghna | Beleric myrobolan *Terminalia belerica* Retz | The dried fruits used alone or in prescriptions (internal) | Cough, heart disease, etc, as purgative and blood cleanser |
| 45 BĪJAPŪRAKA *Ci* 5 166 etc *Syn* Bijapura Matulanga Kesarāmla | Adam s apple tree *Citrus medica* Linn | The fruit taken alone or in prescriptions (internal) | Colic pain alcoholism, as appetizer |
| 46 BILVA *Su* 2 19 etc *Syn* Śriphala Śailapatra Tripatra, Mahāphala Mahakap ttha | Bengal quince *Aegle marmelos* Corr | The fruit used alone or in prescript ons (internal) | *Diarrhoea constipation, in rejuvenation* |
| 47 BIMBĪ *Su* 1 78 etc *Syn* Tundi Piluparnī, Oṣṭhī, Bimba, Bimbaka Raktaphala Tiktatuṇḍī | Kunch tree *Cephelendra indica* Naud | The dried root or juice used in prescript ons (internal and external) | Hard tumours, piles, as purgative and emetic |
| 48 BRĀHMĪ *Su* 8 58 etc *Syn* Vayastha, Surasa Somavallarī, Subarcala | Indian pennywort *Herpestis monniera* H B & K | The dried and powdered plant used in prescriptions (internal) | Senile decay, loss of memory, as preventive of abort on |
| 49 BRHATĪ *Ci* 19, 26, etc *Syn* Mahati Hinguli Prasaha, Bṛhatikā Vartaki, Kanta | Indian nightshade *Solanum indicum* Linn | The leaves and roots used in prescriptions (internal and external) | Diarrhoea, toxicosis, pain and oedema of the vagina |
| 50 CANDANA *Ci* 1/1, 148, etc *Syn* Malayaja Gandhasara Śitahima | Sandal wood tree *Santalum album* Linn. | The powdered wood or paste in prescriptions (internal and external) | Diarrhoea, vomiting, chronic skin diseases, etc |
| 51 CARAṬĪ *Ci* 9, 45 etc | *Ionid um suffruticosum* De | The plant used as ingredient of medicinal ghee | Insanity, epilepsy for proper growth in childhood |
| 52 CAVIKĀ *Ci* 18 158 etc *Syn* Cavya Cavi Nakulī, Cavyaka | *Piper chaba* Hunter | Decoction of the roots and dried fruits used for medicinal ghee | Consumptive cough, indigestion, change of voice, emaciation, etc |
| 53 CILLI *Su* 27, 98 | Wild spinach *Chenopodium album* Linn | Cooked as a pot herb | As aid to elimination |
| 54 CIRABILVA *Ci* 3 267 etc *Syn* Naktamāla Putiparṇa | Indian beech *Pongamia glabra* Vent | Decoction of the sprouts used in prescriptions (internal) | Fever, disorders of the spleen |

TABLE 3

*Medicinal Plants and Plant Products and their Uses—(Contd )*

| Name in Caraka reference and synonyms if any | Modern and botanical names | Mode of use | Medicinal uses in |
|---|---|---|---|
| 55 CIRMAṬA *Ci* 19 32 etc. *Syn* Kṣetracirmita, Pāṇḍuphala, Pāṭhyā | *Cucumis melo* Linn. | The seeds used in decoction The *fruit taken alone or as ingredient* of sweet drink | Dysentery, as laxative |
| 56. CITRAKA *Sū.* 2, 28, etc. *Syn* Pāṭhi Dāruṇa, Raktacitraka, Uṣaṇa | White lead wort *Plumbago zeylonica* Linn | Decoction of the roots and leaves used in prescriptions for internal use | Urinary diseases, anaemea, etc, as laxative and digestive |
| 57 CORAKA *Sū.* 3, 24 etc. *Syn* Parnacoraka, Phalacoraka, Kṣemaka | Indian angelica tree *Angelica glauca* Edgew | The roots and stalks used in internal and external prescriptions | Headache, epilepsy, hiccup, etc. |
| 58 CUKRA *Ci* 8, 131 | Wood sorrel tree *Rumex vesicarius* Linn | The extracted juice as ingredient of vegetable soup | Anorexia |
| 59 CUÑCUPARṆIKĀ *Sū* 27, 100 | Coxcomb plant *Corcorus olitorius* Linn. | Cooked as a pot herb | As aid in elimination |
| 60 DĀḌIMA *Sū* 2, 20 etc. *Syn.* Dāḍimba, Raktapuṣpa, Karaka | Pomegranate tree *Punica granatum* Linn. | The fruit juice taken alone or in prescriptions | Diarrhoea, cough, oedema, etc, as digestive and anti-emetic |
| 61 DANTAŚAṬHA *Ci.* 3, 267, etc. *Syn.* Rocanaka, Jambhaka | Lemon tree *Citrus medica* Linn (Variety *C limonum* or *acida*) | The fruit juice taken alone or with drinks | Fever, as digestive |
| 62 DANTĪ *Sū.* 2 9 etc. *Syn.* Udumbaraparṇī, Nikumbha, Makulaka, Citrā | Wild croton *Baliospermum montanum* Muell & Arg | The sun-dried *roots* used in prescriptions for internal use | Oedema, jaundice, stomach complaints |
| 63 DARBHA *Sū.* 4, 12, etc *Syn* Kuśa, Kṣurapatra, Yajñika | Large variety of sacrificial grass *Eragrostis cynosuroides* Beauv | The extract of the grass used in prescriptions for internal use | Senility, wasting diseases, etc, for increasing lactation |
| 64 DĀRUHARIDRĀ *Sū* 4, 11, etc. *Syn* Pītadru, Pītadāru, Pītatvak, Hemakānta | Indian barberry *Berberis asiatica* Roxb | The extract of the plant used in prescriptions for internal use | Haemorrhage, piles, pruritus, alopecia etc |
| 65. DEVADĀRU *Ci.* 16 48, etc *Syn.* Śatapatraka Suradruma, Devadruma | Deodar tree *Cedrus lond* (Varieties *C Libani* Barrl & *C deodara*) H K & F | The dried leaves and the extract of the wood and roots used in prescriptions for internal use | Headache, intestinal worms, urinary diseases, menorrhagia, fistula, etc |

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| 66 DHĀMĀRGAVA *Ka* 4, 1, etc. *Syn* Karkoṭaki, Koṭhaphala, Mahājalinī, Rājakośātakī | Sponge-gourd *Luffa aegyptiaca* Mill | The fruits, flowers and tender leaves used in decoctions for internal use | Cough, toxicosis, phlegm, as purgative and emetic |
| 67. DHANVAN *Ci* 3, 258, etc *Syn* Dhanurvṛkṣa | Indian linden tree *Grewia tiliaefolia* Vahl | The powdered bark used internally in decoctions and externally in ointments | Fever, urinary diseases |
| 68 DHĀNYAKA *Ci* 3, 182, etc *Syn* Tumburuka, Dhanyā, Dhanu, Dhanika, Bijadhānya, Kustumbura | Coriander plant *Coriandrum sativum* Linn | The entire plant used in prescriptions for internal use | As digestive, diaphoretic and an aid to virility |
| 69 DHĀTAKI *Su* 4 15, etc *Syn* Bahupuṣpikā, Dhātrī, Kumuda, Kunjara, Tamrapuṣpī, Parvati | Fulsee flower tree *Woodfordia floribunda* Salisb | The flowers as ingredient of sweetened decoctions for internal use | Fever, haemothermia, as intestinal astringent |
| 70 DHAVA *Su* 3 3, etc *Syn* Madhuravalka, Madhuratvak Vakavṛkṣa | Crane tree *Anogeissus latifolia* Wall | The resin as ingredient of medicinal oil for external application | Chronic skin diseases, senility, dysuria, snake bites, etc |
| 71 DRĀKṢĀ *Ci* 5, 123 etc *Syn* Rasa, Rasālā Madhurasā, Kāśmirikā | Grape vine *Vitis vinifera* Linn | The shoots used in prescriptions the fruits used alone or in drinks | Haemothermia, cardiac disorders, cough, etc |
| 72 DUGDHIKĀ *Ci* 8, 131, etc *Syn* Kṣirinī, Kṣiri, Svāduparṇī, Dugdhi | *Oxystelma esculentum* R Br | Ingredient of vegetable soup | Diarrhoea, painful bleeding piles, etc, as roborant |
| 73 DUHSPARŚĀ *Ci* 24, 166 | Khorasan thorn *Alhagi maurorum* Desu | Infusion in boiling water used in prescriptions (internal) | Acute alcoholism |
| 74 DŪRVĀ *Ci* 3, 258, etc *Syn* Bhārgavī, Śataparvā, Tiktaparvā, Śataviryā, Latā, Śitā | Couch grass *Cynodon dactylon* Pers | The grass leaves as ingredient of medicinal oil | Fever, neuralgic pain, etc, as haemostatic |
| 75 ELA *Sū* 2, 4, etc *Syn* Bhṛngaparṇikā, Tuttha, Kṣudrela, Sukṣmaila | Lesser cardamom plant *Elettaria cardamomum* | The spice used alone or in prescriptions (internal) | Rhinitis hemicrania, pleural affections, etc |
| 76 ELAPARNI *Ci* 8, 131 | Kulanjan plant *Alpinia galanga* Swartz | Ingredient of vegetable soup | Diarrhoea |
| 77. ELVALUKA *Ci* 14, 159 | Cherry tree *Prunus cerasus* Linn | The fruits and roots used in sweetened decoctions (internal) | Abdominal diseases, paralytic conditions, intestinal obstruction, etc |
| 78 ERAKĀ *Sū* 3, 24, etc *Syn* Gundrā, Simbigundrā, Śṛngaverabhamūlaka | Elephant grass *Typha elephantina* Roxb | The decoction of the roots used in prescriptions (internal) | Headache, rheumatic conditions |
| 79 ERANDA *Su* 2, 12, etc. *Syn* Citrabija, Triputi, Tribija, Cancū, Manda, Uruvaka | Castor oil plant *Ricinus communis* Linn | The expressed oil used alone or in prescriptions (internal) | Misperistalsis, as purgative |

# TABLE 3

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|---|---|---|---|
| 80. ERVĀRUKA Ci 26.52, etc<br>Syn Lomaśa, Toyaphala, Lomaśakāṇḍa, Vṛhatphala | Melon cucumber plant<br>*Cucumis utilissimus* Linn | The seeds used in prescriptions (internal) | Urinary calculus, dysuria, diseases of the bladder |
| 81 GAJAPIPPALĪ Ci 12.41, etc<br>Syn Karipippalī, Kuñjarapippalī, Kapivallikā, Hastidanti | Elephant pepper plant<br>*Scindapsus officinalis* Schott | The powdered dried fruit used in prescriptions (internal) | Piles, oedema, anaemia |
| 82 GAVEDHUKA Sū 2.25, etc<br>Syn Gāvedhu, Kṣudra | Job's tears<br>*Coix lachryma Jobi* Linn | The seeds used alone or in infusion, or cooked as cereal | Emaciation and debility |
| 83 HAMSAPĀDĪ Ci 23.220 etc.<br>Syn Godhāpādikā, Hamsavatī, Hamsapādikā, Vikrāntā | Maidenhair<br>*Idiantum capillusveneris* Linn | The seeds used in prescriptions (external) | Suppurations due to poisonous bites, rheumatic conditions |
| 84 HAPUṢĀ Sū 23.20 etc<br>Syn Habuṣā, Vipuṣā, Vigandhikā | Juniper tree<br>*Juniperus communis* Linn | The seeds in decoction or as ingredient of medicinal ghee (internal) | Female diseases dysuria, throat spasms, etc |
| 85 HARIDRĀ Sū 4.11 etc<br>Syn Pītaka, Haridruma | Turmeric plant<br>*Curcuma longa* Roxb | The dried tubers used in prescriptions (external and internal) | Dermatosis, toxicosis, senility, impaired vision, etc |
| 86. HARĪTAKĪ Sū 13.92, etc<br>Syn Amṛtā, Śivā, Divyā, Prāṇadā, Vanaṭikā, Cetakī, Jīvanikā, Abhayā | Chebulic myrobalan<br>*Terminalia chebula* Retz | The dried fruits and seeds taken alone or in prescriptions (internal) | Dermatosis, oedema, urinary diseases, as general tonic, blood purifier and purgative |
| 87 HIṄGU Sū 2.29 etc<br>Syn Hiṅguka | Asafoetida plant<br>*Ferula tourneri* Linn (Varieties *F. foetida* Regel *F. narthex* Boiss) | The dried fruits as ingredient of gruel | Cough, dysuria, dermatosis etc, as laxative, digestive, and rejuvenant |
| 88. HIṄGUPARṆĪ Ci 9.57 etc | Emetic nut<br>*Randia dumetorum* Lamk | A decoction of the nuts used in prescriptions (external and internal) | Inguinal swellings, spleen diseases, helminthiasis, etc |
| 89 IKṢU Sū 4.10 etc | Sugarcane<br>*Saccharum officinarum* Linn | The juice used as drink or as ingredient of mixed drink, the roots used in prescriptions | Loss of voice, vomiting, morbid thirst, for longevity, as a roborant |
| 90. IKṢURAKA Ci 4.78, etc<br>Syn Kṣuraka, Trikṣura, Vajra, Kokilākṣa | Long leaved barberia<br>*Asteracantha longifolia* Nees | A decoction of the leaves and roots used alone or in prescriptions (internal) | Urinary calculus, haemothermia, as an aid to virility |

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| 91 INDRAVĀRUṆI *Ci* **14**, 138 | Bitter cucumber plant *Citrullus colocynthis* Schrad | Decoction of the fruits used in prescriptions (internal) | Piles |
| 92 INGUDĪ *Ci* 1/3, 15, etc *Syn* Bhallakivṛksa, Tiktaka, Visagandhaka, Tailaphala | Zachum oil plant *Balanites roxburghi* Plarch | The alkali from the plant-ash used in prescriptions | Dermatosis, urinary diseases, for rejuvenation |
| 93 ITKAṬA *Su.* **4**, 12/17, etc | Prickly sesban *Sesbania aculeata* Pers | Decoction of the grass roots as ingredients of prescriptions and ointment (internal and external) | Fever, for increasing lactation |
| 94 JALAPIPPALĪ *Su* **27**, 171 | Poison buttercup *Ranunculus sceleratus* Linn | The entire plant made into paste for local application | Ulcers |
| 95 JAMBU *Su* **2**, 28 etc *Syn* Jambula, Mahājambu, Rajajambu, Kakajambu | Jambol tree *Eugenia fruticosa* Roxb or *Eugenia jambolana* Linn | Seeds, leaves and the stones of the fruits used in decoctions, the bark used in prescriptions (internal) | Diarrhoea, consumption, nausea, as astringent |
| 96 JĀTIPHALA *Ci* **3**, 207, etc | Nutmeg trees *Myristica fragrans* Houtt | The fruits used in preparing medicinal oil (external) | Hard cutaneous eruptions, pruritus, poisoning etc |
| 97 JAYĀ, *Ci* **9**, 45 *Syn* Jayanti | Sesban tree *Sesbania aegyptica* Pers | A decoction of the entire plant used in prescriptions (internal) | Insanity, strokes, epilepsy |
| 98 JIMŪTA *Sū* **1**, 81, etc *Syn* Jimutaka Garagari, Veni Devatadaka | Bristly luffa *Luffa echinata* Roxb | The flowers and fresh fruits used in prescriptions, the powder of the dried fruit taken alone | For emesis and enema in fever consumption, anaemia, etc |
| 99 JINGINĪ *Ci* **30**, 83, etc | Indian ash tree *Odina wodier* Roxb | Decoction of the leaves as ingredient of astringent douche | Morbid discharges from vagina |
| 100 JĪRAKA *Ci* **2/1**, 43, etc *Syn* Jirā, Ajaji | Cumin plant *Cuminum cyminum* Linn | The seeds used in prescriptions (internal) | General tonic for all ailments, as an aid to virility |
| 101 JĪVANTĪ *Su* **3**, 25, etc *Syn* Hemavatī, Jivaniya, Jivapuṣpa | Cork swallow wort *Dendrobium macrei* Linn. | The fruits taken alone or as ingredient of unguent or decoction | Snake-bite, chest congestion, cough, for rejuvenation and longevity |
| 102 JŪRNĀJHYĀ *Su* **21**, 25, etc | Sorghum *Sorghum vulgare* Pers | Cooked as cereal food | Obesity, as cooling and astringent |
| 103 JYOTIṢMATĪ *Su* **1**, 38, etc *Syn* Durmada, Jyotirlatā, Parāvatapadī | *Cardiospermum halicacabum* Linn | A decoction of the roots or seeds used in prescriptions (internal) | Headache rhinitis, fainting, as purgative |
| 104 KADALĪ *Ci* **3**, 268, etc *Syn* Rambhā Sakṛtphala | Banana tree *Musa sapientum* Linn | The fermented fruit or the alkaline extract of the ashes used in prescriptions, the pith, bulb and roots also used (internal) | Dermatosis, leucoderma, piles, urinary diseases, abdominal diseases, blood vomiting |
| 105 KADAMBA *Ci* **18**, 154 *Syn* Nipa Sidhupuṣpa, Bhṛngavallabha, Bhūmikadamba | Kadamba or wild cinchona plant *Anthocephalus cadamba* Mig | The resin or an extract of the bark used in prescriptions (internal) | Urinary anomalies, rheumatism, as sedative |

TABLE 3

*Medicinal Plants and Plant Products and their Uses—(Contd )*

| Name in Caraka reference, and synonyms if any | Modern and botanical names | Mode of use | Medical uses in |
|---|---|---|---|
| 106 KADARA *Sū* 25, 49, etc. Syn Varvara | Gum arabic tree *Acacia arabica* Willd | The gum or milky exudate or a decoction of the leaves used in prescriptions (internal) | Urticaria, fever, etc |
| 107 KĀKAḌUMBARIKĀ *Ci* 7, 170 | Redwood fig tree *Ficus hispida* Linn | A paste of the fruits used in prescriptions (external) | Leucoderma |
| 108 KĀKAMĀCĪ *Sū* 27, 89 etc. Syn Kākamācikā, Kākāhvā, Kākamātā | Black nightshade *Solanum nigrum* Linn | The entire plant cooked and used as vegetable | Skin lesions, oedema, etc, as aphrodisiac |
| 109 KĀKANĀSĀ *Ci* 18, 40, etc Syn Kākatuṇḍaphala, Vāyasī | Indian perry *Hygrophila angustifolia* R Br | A paste of the leaves used in ointments or in medicated ghee (internal) | Hard nodules on the skin, jaundice, cough consumption, etc |
| 110 KĀKĀNDOLĀ *Sū* 27, 31 | Sword bean *Canavalia ensiformis* Dc | The lentils used as food | As an aid to elimination, as an aphrodisiac and an aid to virility |
| 111 KAKKOLA *Ci* 26, 210, etc Syn Takkola, Sthulamarica, Koraka, Karkolaka | Cubebs plant *Piper cubeba* Linn | A paste of the fruits as ingredient of medicinal oil or mouth wash | Oral and dental diseases, fevers, loss of voice, etc |
| 112 KALAMBA *Sū* 27, 100 | Wild pot herb *Ipomoea reptans* Poir | Cooked as a *pot herb* | As a digestive, a cooling agent and an aid to elimination |
| 113 KĀLĀNUSĀRIKĀ *Ci* 26, 243 | *Ichnocarpus frutescens* R Br | An extract of the leaves as ointment (external) | All eye-diseases, as a promotor of eyesight |
| 114 KĀLAŚĀKA *Sū* 27, 91, etc Syn Kālaka | Jute plant *Corchorus capsularis* Linn | The cooked leaves (internal) | Poisoning oedema, intestinal stasis, etc |
| 115 KALĀYA *Ci* 20, 37, etc | Chickling-vetch lentil *Lathyrus sativus* Linn | A decoction of the leaves (internal), the paste of the lentil for local application | Vomiting, nausea, suppurated wounds |
| 116. KĀLEYAKA *Sū* 3, 26 | Yellow sandal tree *Santalum flavum* Linn | A paste of the finely divided wood as ointment (external) | As a cooling agent |
| 117 KAMALA *Sū* 3, 24 etc Syn Padma Paṅkaja, Nalika Ambuja, Kokanada, Puṇḍarīka | East Indian lotus plant *Nelumbium speciosum* Willd | The paste of the petals as ingredient of an *unguent*, cold aqueous extract used as drink | Nasal haemorrhage, dysuria |

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| 118 KAMPILLAKA *Su* 1, 83 | The kamala dye plant *Mallotus philippinensis* Muell | Extract as ingredient of medicinal oil and in internal prescriptions | Chronic skin diseases oedema, as purgative |
| 119 KANAKAPUṢPI *Ci* 7, 167 | Golden thistle or yellow thistle *Euphorbia thomsoniana* Boiss | The petals as ingredient of ointment | Leucoderma |
| 120 KANṬAKĀRI *Su* 2, 72 etc *Syn* Kaṇṭakārikā, Vyāghrī | Wild egg plant *Solanum anthocarpum* Schr & Wendl | Extract of the entire plant and fruits in prescriptions (internal) | Dysuria, misperistalsis etc, for rejuvenation |
| 121 KAPITANA *Ci* 15, 126 | Flowering peepul tree *Thespesia populnea* Solard | Extract of the root and bark used in medicated ghee | Bleeding piles pain in the rectal region etc |
| 122 KAPITTHA *Ci* 6, 35 etc *Syn* Dantaphala Gandhaphala | Wood apple tree *Feronia elephantum* Corr | Powdered leaves made into linctus with honey the fruits used alone or in prescriptions (internal) | Urinary disorders chronic skin diseases toxicosis etc |
| 123 KARAMARDA *Vi* 8, 140 etc *Syn* Jātīpuṣpa Karamardaka | Bengal currant *Carissa carandas* Linn | A decoction of the fruits used in prescriptions (internal) | Disorders of the first humor |
| 124 KARAÑJA *Su* 3, 3 etc | Indian beech tree *Pongamia glabra* Vent | The leaves soaked in ox bile and made into ointment dried powder in prescriptions (internal) | Dermatosis pain in stomach and spleen ear ache etc |
| 125 KĀRAVELLIKĀ *Vi* 8, 143 | Bitter gourd plant *Momordica charantia* Linn | The decoction of the fruits and leaves as ingredient of enema or in prescriptions (internal) | Cough haemothermia etc |
| 126 KARAVĪRA *Su* 3, 15 etc. *Syn* Vīrā Vīraka Divyapuṣpa | Roseberry spurge plant *Nerium odorum* Soland | A decoction of the root bark in water in prescriptions (internal) | Skin diseases toxicosis wounds, etc |
| 127 KARCURA *Su* 27, 155 | Zedoary tree or Sati plant *Curcuma zedoaria* Rosc | The fruit without the rind taken alone | Cough hiccup piles etc as appetizer |
| 128 KARĪRA *Ci* 30, 82, etc *Syn* Tīkṣṇakaṇṭaka | Caper plant *Capparis aphylla* Roth | The decoction of the leaves as ingredient of vaginal douche or rectal enema | Morbid discharges from the vagina retention of urine, stool and flatus |
| 129 KARKANDHU *Su* 4, 13, etc *Syn* Karkandhuka | Wild jujuba plant *Zizyphus nummularia* Mill | A decoction of the plant used in prescriptions or in warm enema (internal and external) | As purgative |
| 130 KARKAṬAŚṚṄGI *Ci* 17, 101 etc *Syn* Karkaṭākhya Kuliraśṛṅgāya | *Rhus succedanea* Linn | The powdered nut in prescriptions (internal) | Cough hiccup nausea |
| 131 KARKAṬAKI *Su* 27, 100 | *Momordica cochinchinensis* Spreng | The cooked fruit used as an article of food | As an aid to elimination |

TABLE 3

*Medicinal Plants and Plant Products and their Uses—(Contd )*

| Name in Caraka reference, and synonyms if any | Modern and botanical names | Mode of use | Medicinal uses in |
|---|---|---|---|
| 132 KARKOṬAKA Ci 3, 189 | *Momordica dioica* Roxb | Leaves and fruits cooked as vegetables | Fever, as an astringent |
| 133 KĀRPĀSA Ci 26, 69 etc *Syn.* Kārpāsi, Picū | Levantine cotton tree *Gossypium herbaceum* Linn | A decoction of the root bark used in prescriptions (internal and external) | Dysuria, scabies, and scrofula |
| 134 KARPŪRA Ci 28, 153 | *Limnophila gratissima* Blume | The entire plant compounded into medicinal oil (internal) | Consumption, sallow complexion, as vitalizer |
| 135 KARVUDĀRA *Su* 27, 99, etc *Syn* Kovidāra Śvetakāñcana, Vanarāja | White mountain ebony *Bauhinia racemosa* Lamk | As an article of food | Hemothermia, haemorrhage, as an aid to elimination |
| 136 KĀŚA *Sū* 4, 12 etc *Syn* Śaradā, Kuśī, Camarapuṣpikā | Thatch grass *Saccharum spontaneum* Linn | A decoction of the grass (internal) | Senility, fever, as promoter of lactation |
| 137 KĀŚAMARDA Ci 18, 117, etc *Syn* Kāsāri, Kāsamardaka | Senna sophera plant *Cassia sophera* Linn or *Senna purpurea* Roxb | The entire plant as an ingredient of medicated ghee | Cough, *female diseases, etc* |
| 138 KĀŚMARĪ Ci 26, 167 *Syn* Kāśmarya Kāśmurī Mahābhadra Bhadra | White teak *Gmelina arborea* Linn | A paste of the leaves as ingredient of medicated ghee | Stiffness of the back, facial paralysis, hoarseness, etc |
| 139 KAŚERUKA *Si* 3, 21 etc *Syn* Kaseru | Tiger nut or rush nut tree *Scirpus grossus* Linn or *S kysoor* Clarke | A paste of the tubers (external and internal) | Rheumatism, *haemothermia*, wasting diseases, etc |
| 140 KAṬAKA Ci 26, 251 etc *Syn* Ambuprasādana Tiktamarica, Toyaprasādaphala | Clearing nut tree *Strychus potatorum* Linn | A paste of the seeds used in ointment | Eye-diseases, failing eyesight, discharges from eyes, etc |
| 141 KAṬABHĪ Ci 9, 70 etc *Syn* Pāṭalī, Ksudraśyāmā | White siris *Albizzia procera* Benth | The powdered bark made into a paste with goat's urine along with other ingredients (internal) | Intestinal worms, toxicosis, oedema, urinary disorders, etc |
| 142 KAṬPHALĀ *Si* 28, 152 | Bay berry tree *Myrica nagi* Thunb | The bark used in sweetened decoctions (internal) | Bronchial asthma, cough, diarrhoea, etc |
| 143 KAṬṬAPHALA Ci 28, 152 | Musk mallow *Hibiscus abelmoschus* Linn | A decoction of the seeds used in prescriptions (internal) | Vomiting spleen disorders, pectoral lesions, etc |

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| 144 KAṬṬAROHIṆĪ *Sū.* 23, 19 etc *Syn* Śataparvā Kaṭuka Śakulādanī Ariṣṭa, Aśokarohiṇya | Hellebore plant *Picrorhiza kurrooa* Royle | A decoction of the roots and tubers in prescriptions (internal) | Dermatosis jaundice piles as a purifying agent for breast milk |
| 145 KAṬVAṄGA *Sū* 25, 40 etc | Indian calosanthes tree *Ailanthus excelsa* Roxb. | A decoction of the leaves in prescriptions (internal) | Menstrual disorders pectoral lesions, diarrhoea etc |
| 146 KEŚARA *Ci* 2/1 32 etc *Syn* Nāgakeśara Keśarī Tuṅgī | Fragrant poon *Ochrocarpus longifolius* Hook & Benth | The powdered dried buds used in prescriptions (internal) | Irregular fever jaundice etc |
| 147 KHADIRA *Ci* 4, 70 etc *Syn* Somavalka | Catechu tree *Acacia catechu* Willd | The flowers or the fermented wine from the resinous exudate used in prescriptions (internal) | Haemothermia urinary disorders blood poisoning |
| 148 KHARJURA *Sū* 23 38 etc. | Date palm *Phoenix sylvestris* Roxb | The dried fruits as food or in fermented liquors | Alcoholism wasting diseases, trauma erysipelas etc |
| 149 KIRĀTATIKTA *Sū* 4, 12 etc *Syn* Kirātatiktaka Kaṭutikta Tṛṇanimba | Chiretta plant *Swertia chirata* Ham | The entire plant used in paste or decoction (internal) | Fever for purification of blood and breast milk |
| 150 KODRAVA *Su* 21, 25 etc | Common millet *Paspalum scrobiculatum* Linn | Used as cereal food | Piles cough obesity etc |
| 151 KAIDARYA *Sū* 4, 10 etc *Syn* Kaiṭarya | Curry neem plant *Murraya koenigii* Spreng | The leaves and barks used in decoctions (internal) | Intestinal worms dysuria hoarseness |
| 152 KOṢĀMRA *Ci* 30, 82 | Gum lac tree *Schleichera trijuga* Willd | The expressed oil used as ingredient of medicated applications (external) | All morbid discharges from the vagina |
| 153 KRAMUKA *Sū* 25 49 etc *Syn* Jīrṇapatra | Betel nut *Areca catechu* Linn | A paste of the nut with sandal wood or in decoction with other drugs (internal) | Bronchial asthma anaemia anorexia skin diseases |
| 154 KṚṢṆAŚAIREYAKA *Ci* 26, 268 | Purple nail-dye plant *Barleria strigosa* Willd. | A decoction of the plant used in prescriptions (external) | All eye-affections skin discolorations, etc |
| 155 KṚṢṆAŚANA *Ci* 26, 269 | Flax hemp plant *Crotalaria verrucosa* Linn | The juice of the plant used in prescriptions (external) | As above |
| 156. KṚTAVEDHANA *Su.* 1, 83 etc *Syn* Kośātak Mṛdaṅgaphala | Bitter luffa plant *Luffa acutangula* Roxb | The fruits and seeds used in prescriptions (internal) the flowers fermented as wine | As purgative and emetic as tonic |
| 157 KṢAVAKA *Vi* 7, 17 etc *Syn* Kṣavaka Ugra | Sneeze-wort *Centipeda orbicularis* Lour | Extract of the seeds and leaves used in prescriptions (internal and external) | Helminthiasis fever dermatosis etc |

TABLE 3

*Medicinal Plants and Plant Products and their Uses—(Contd )*

| Name in Caraka reference, and synonyms if any | Modern and botanical names | Mode of use | Medicinal uses in |
|---|---|---|---|
| 158 KṢĪRAVALLĪ Vi 8, 139 | Ring coronet tree *Holostemma rheedii* Wall | A decoction of the leaves in milk, used as ingredient of medicinal ghee | Disorders of the second humor |
| 159 KṢĪRAVIDĀRĪ Vi 8, 139 Syn Kṣīralatā | Milky yam *Ipomoea digitata* Linn | As above | As above |
| 160 KULATTHA Sū 2, 12, etc Syn Kulittha, Kulatthikā | Horse gram *Dolichos biflorus* Linn | The cooked pulse used as food or as paste in prescriptions (internal) | Misperistalsis, fever, emaciation cough, etc. |
| 161 KUMĀRAJĪVA Sū 27, 100 | *Putranjiva roxburghii* Wall | The leaves used as vegetable | As an aid to elimination |
| 162 KUMMI Vi 8, 144 | Saffron mango tree *Careya arborea* Roxb | A decoction of the leaves used in prescriptions (internal) | Disorders of the third humor, as astringent and purgative |
| 163 KUMUDA Sū 27, 117, etc Syn Aravinda, Svetajalaja | White water lily *Nymphaea alba* Linn | The seeds and flowers taken raw | Urinary diseases, alcoholism, as intestinal astringent |
| 164 KUNKUMA Ci 23,55 etc. Syn *Rudhira*, *Vadhrika*, *Kāśmīra*, *Agniśikhā* | Saffron plant *Crocus sativa* Linn | The powdered tendrils as ingredient of pills | Cataract, dimness of vision, night-blindness |
| 165 KUṢMĀṆḌA Sū 27, 102 | White gourd plant *Benincasa cerifera* Savi | Cooked as food, the plant used as vegetable | As a digestive and as an aid to elimination |
| 166 KUṢṬHA Sū 3, 1, etc Syn Kuṭhika, Puṣkara, Kāśmīraja | Indian costus or Orris root *Saussurla lappa* Clark or *Iris florentina* Linn | The root is soaked in ox bile for external application, decoction or powder in prescriptions (internal) | Anaemia, chronic skin diseases, toxicosis, colic pain, cardiac *disorders*, etc |
| 167 KUSTUMBAKA Vi 7, 17, etc Syn Dhanya Dhānyaka, Tumburuka | Coriander plant *Coriandrum sativum* Linn | Used in prescriptions and in enemas (internal and external) | Piles dermatosis, intestinal worms |
| 168. KUSUMBHA Sū 13, 10 etc. Syn Latvā | Safflower plant *Carthamus tinctorius* Linn | The seeds or oil used as food or cooking medium, also for local application | Phlegm, urinary gravel, dysuria, insect bites |
| 169 KUTAJA Sū 1, 83, etc Syn Kurci, Vatsaka, Girimallikā, Kutajatvaka, Sakra | Kurchi plant *Holarrhena antidysentrica* Wall | The bark and seeds used in prescriptions (internal and external) | Skin diseases, haemorrhage, fever, assimilation disorders, as purgative and emetic |
| 170 KUTUMBAKA Sū 27, 93, etc | *Leucas linifolia* Spreng | The plant cooked as pot herb | As an aid to elimination |

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| 171. KŪVALA *Sū* **4**, 10, etc | Small jujuba plant *Zizyphus sativus* Gaertn | The fruits taken alone | As cordial and purgative |
| 172 LAKṢMANA *Su* **27**, 101 | Mandugora plant *Atropa mandragora* Linn | Cooked as pot herb | Constipation |
| 173 LĀMAJJAKA *Su* **3**, 29 | Geranium grass *Andropogon iwarancusya* Jons | The powdered and dried leaves for external application | Minor skin eruptions, body-odour |
| 174 LĀNGALIKI *Su* **8**, 38 | Superb lily *Ipomoea pestigridis* Linn | Inhalation of the fresh or dried powdered petals compounded with cow's urine (internal) | Labour pain pruritus, dermatosis as laxative |
| 175 LASUNA *Su* **2**, 3 | Garlic plant *Allium sativum* Linn | The spice used alone or in prescriptions (internal and external) | Rhinitis skin diseases intestinal worms leprosy etc, as aphrodisiac |
| 176 LAVALĪ *Su* **27**, 145 | Star gooseberry tree *Phyllanthus distichus* Muell | The fruits used alone | As astringent cordial and appetizer |
| 177 LAVANGA *Ci* **26**, 210, etc *Syn* Lavangaka | Clove plant *Eugenia caryophyllata* Thunberg | The dried flowers alone or in medicinal oils | Cough, hiccup vomiting inflammatory conditions of the mouth and throat, halitosis |
| 178 LODHRA *Su* **3**, 5 etc *Syn* Lodh Tilvaka | Lodh tree *Symplocos racemosa* Roxb | The dried root bark used in internal and external prescriptions | Obstinate skin diseases, haemothermia urinary diseases, as intestinal astringent |
| 179 LONIKĀ *Ci* **14**, 123 *Syn* Lona Loni | Parschane plant *Portulaca oleracea* Linn | The plant cooked as vegetable | Piles |
| 180 MADANA *Su* **1**, 81, etc *Syn* Piṇḍitaka | Emetic nut *Randia dumetorum* Lamk | The nuts and seeds used in various prescriptions containing honey and rocksalt for internal use | Fever piles dermatosis chronic rhinitis coryza, etc, as emetic and purgative |
| 181 MADAYANTIKĀ *Ci* **10**, 21, etc *Syn* Medika | Henna plant *Lawsonia alba* Lamk | The entire plant as ingredient of medicinal ghee for internal and external use | Epilepsy, malignant jaundice grey hairs etc |
| 182 MADHUPARNĪ *Sū* **3**, 21 etc. *Syn* Madhuvrksa Madhukapuspa, Madhukapuṣpī | Mohua tree Indian butter tree *Bassia latifolia* Roxb | The fruits taken alone or made into alcoholic beverages | Rheumatism fever spleen diseases, dyspepsia etc for rejuvenation and virility |
| 183 MAHĀMEDĀ *Sū* **4**, 9/1, etc *Syn* Śatamuli Śatāvarī Śatapadī | Indian asparagus *Asparagus racemosa* Willd or *A sermentosa* Willd | Cooked as vegetable the bark and leaves used in prescriptions (internal) | As analgesic and as an aid to prolongation of life |
| 184 MAHĀŚRĀVANĪ *Ci* **3**, 258, etc *Syn* Mahāśrāvanikā Alambuṣā | East Indian globe thistle *Sphaeranthus indicus* Linn | A decoction of the plant used in prescriptions (internal) | Fever rheumatism for rejuvenation |

TABLE 3

*Medicinal Plants and Plant Products and their Uses—(Contd )*

| | Name in Caraka reference and synonyms if any | Modern and botanical names | Mode of use | Medicinal uses in |
|---|---|---|---|---|
| 185 | MAKUṢṬHA *Sū* 26, 84 etc<br>*Syn* Makuṣṭhaka | Moth bean<br>*Phaseolus aconitifolius* Jach | The dried beans cooked as food | Fever haemothermia, consumption and wasting diseases |
| 186 | MĀLATĪ *Sū* 5, 73 etc.<br>*Syn* Jatī Gandhamālatī | Malabar nutmeg plant<br>*Aganosma caryophyllata* G Don | The stalks used in decoctions, also the essential oil of the petals in prescriptions (external) | Dermatosis female diseases etc , for oral hygiene |
| 187 | MĀMSĪ *Ci* 7, 87, etc<br>*Syn* Jaṭāmāṃsī Jaṭī, Jaṭā, Lomaśā Nālada | Musk root plant<br>*Nardostachys jatamansi* De | The dried roots or leaves used in prescriptions (external and internal) | Skin diseases, piles, rectal prolapse, toxicosis urinary calculus, etc |
| 188 | MAṆḌŪKAPARṆĪ *Sū* 27, 95 etc<br>*Syn* Maṇḍūkaparṇikā, Maṇḍukī | Indian pennywort<br>*Hydrocotyle asiatica* Linn | A decoction of the leaves used internally | Pectoral lesions diarrhoea etc for rejuvenation |
| 189 | MAÑJIṢṬHĀ *Sū* 4, 10/2 etc | Indian madder<br>*Rubia cordifolia* Linn | The powdered dried roots and fruits used in prescriptions (internal) | Skin diseases and diseases of the spleen |
| 190 | MARICA *Sū* 2, 3 etc | Black pepper plant<br>*Piper nigrum* Linn | The dried seeds used as spice or in prescriptions (internal) | Rhinitis anaemia fainting, consumption, cough, etc |
| 191 | MĀRIṢA *Sū* 27, 100 | Gangetic amaranth plant<br>*Amaranthus gangeticus* Linn | Cooked as pot herb | As an aid to elimination |
| 192 | MADHUKA *Sū* 2, 7, etc<br>*Syn* Atirasā Madhurasā, Madhulī Madhuyaṣṭikā Madhuyaṣṭyāhvā, Yaṣṭhimadhu Yaṣṭhimadhuka | Liquorice plant<br>*Glycyrrhiza glabra* Linn | The stalks used alone and in various prescriptions (internal) | Cough hiccup, fever, spleen disorders as an aid to rejuvenation |
| 193 | MARUBAKA *Ka* 1, 23 | Sweet marjorum<br>*Origanum marjorana* Linn | A paste of the seeds in prescriptions (internal) | As emetic |
| 194 | MĀṢA *Sū* 2, 28 etc<br>*Syn* Kuruvinda | Black gram plant<br>*Phaseolus mungo* Linn | As ingredient of gruel decoctions, medicinal oil etc (internal) | Suppurations rheumatism etc as an aid to prolongation of youth |
| 195 | MĀṢAPARṆĪ *Sū* 4,9 etc.<br>*Syn* Vajramulī Māṣaparṇikā, Ṛṣyaprokta | *Teramnus labialis* Spreng | Cooked as food, the paste as ingredient of prescriptions (internal) | Fever rheumatic conditions, for longevity |
| 196 | MASŪRA *Sū* 27, 28 etc<br>*Syn* Masuraka | *Lens esculenta* Moench | Cooked as food or as ingredient of prescriptions (internal) | Griping pain haemothermia spleen diseases etc |

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| 197 MATSYĀKṢAKA *Ci* **1/3** 24 | *Alternanthera sessilis* R Br | The entire plant used in prescriptions (external and internal) | As an aid to memory intelligence and bright complexion |
| 198 MĀTULUṄGA *Su* **4,** 10, etc. | Pomelo tree *Citrus decumana* Linn | The tendrils of the flowers used internally | Nausea anaemia, colic pain, jaundice suppurated conditions, etc |
| 199 MEDĀ *Su* **4,** 9/1, etc | *Litsaea sebifera* Pers | The sap or a decoction of the bark, used in prescriptions (internal) | Dysentery diarrhoea, rheumatism, as promotor of longevity |
| 200 MEṢAŚṚṄGĪ *Ci* **3,** 267, etc. *Syn* Meṣaviṣaṇika, Mesavalli | Indian screw tree *Helicteres isora* Linn | A decoction of the leaves used in prescriptions (internal) | Fever |
| 201. MṚGALIṆḌIKĀ *Su* **25,** 49 | Chinese gooseberry tree *Averrhoa carambola* Linn | The fruits fermented to a beer like liquor | Insomnia depression, anorexia, etc |
| 202 MUDGA *Su* **21,** 25 | Green gram *Phaseolus radiatus* Linn. or *P aurea* Prain or *P sublobatus* Roxb | Used as a pulse in diet | Excessive obesity urinary diseases, etc as a nourishing food |
| 203 MUDGAPARṆĪ *Ci* **7,** 123, etc *Syn.* Mudgaparṇinī | *Phaeseolus trilobus* Ait | As above | Dermatosis rheumatic conditions, etc for longevity |
| 204 MUKULAKA *Su* **7,** 123, etc | Edible pine tree *Pinus gerardiana* Wall | The plant used in decoctions (internal) | Suppurated swellings urinary diseases etc |
| 205 MŪLAKA *Su* **27,** 169, etc *Syn* Mahakanda | Garden radish *Raphanus sativus* Linn | The tender tubers taken cooked or used in prescriptions (external and internal) | Discordance of the three humors (tranquilizer) skin diseases, oedema alcoholism etc |
| 206 MUÑJĀTAKA *Ci* **22,** 30, etc | Salep or salem plant *Eulophia campestris* Wall | The juice of the roots used alone, in prescriptions and in enema (internal and external) | Morbid thirst leucorrhoea irregular fever etc, as aphrodisiac |
| 207 MŪRVĀ *Sū* **11,** 11, etc *Syn.* Murvī, Guḍuci | *Sansevieria roxburghia* Schott | The dried flowers and leaves used in prescriptions (internal) | Fever vomiting cough etc as appetizer |
| 208 MUṢKAKA *Ci* **15,** 189, etc | Parula tree *Stereospermum suaveolens* De | The alkaline ash of the leaves and bark used in prescriptions | Anaemia piles all types of throat affections |
| 209 MUSTĀ *Su* **3,** 5, etc. *Syn* Musta, Mustaka | Nut grass *Cyperus rotundus* Linn | The grass dried powdered and soaked in ox bile used in prescriptions (internal and external) | Obstinate skin diseases, wounds paralytic conditions urinary diseases etc |
| 210 NĀḌĪ *Su* **27,** 97 | *Ipomoea aquatica* Forsk | Cooked as pot herb | As digestive and regulator of bile secretion |
| 211 NĀGABALĀ *Ci* **1/1,** 45, etc *Syn* Kṣaragandhā | Gingo-fruit tree *Sida spinosa* Linn | A decoction of the dried roots used in prescriptions (internal) | Seminal weakness, general debility, chest affections etc |

TABLE 3

*Medicinal Plants and Plant Products and their Uses*—(*Contd*)

| Name in Caraka reference, and synonyms if any | Modern and botanical names | Mode of use | Medical uses in |
|---|---|---|---|
| 212 NĀGARAṄGA *Sū* 27, 156 | Orange tree *Citrus aurantium* Linn | The fruits used alone | As cordial and digestive |
| 213 NALA *Ci* 4, 103, etc | Nodding reed *Phragmites karka* Trin | A decoction of the reeds used in prescriptions (internal and external) | Haemothermia, fever, herpes, erysipelas, etc |
| 214 NALIKĀ *Ci* 28, 152 | Hairy onosma tree *Onosma echioides* Linn | The buds used as ingredient of medicinal oil (internal) | Cough, consumption, sallow complexion, pectoral lesions, etc |
| 215 NANDITAKA *Ka* 8, 140 | Oval leaved fig tree *Ficus retusa* Linn | The dried fruits as ingredient of prescriptions (internal) | Imbalance of the humors (tranquilizer) |
| 216 NAVAMALLIKĀ *Ci* 26, 184 | Jasmine *Jasminum sambac* Ait | The petals and leaves as ingredients of nasal medication | Affections of the head |
| 217 NĪVĀRA *Ci* 4, 36, etc *Syn* Munidhānya, Tṛṇadhānya | Wild rice plant *Hygroryza aristata* Ness | The cereal used as food | Haemothermia |
| 218. NICULA *Sū* 2, 10, etc. *Syn* Hijjala, Dhātriphala | Hiral tree *Barringtonia acutangula* Gaertn | The fruits and leaves used in alkaline decoction or paste in prescriptions (internal) | Abdominal and splenic disorders, jaundice etc, as purgative |
| 219 NIKOCAKA *Sū* 27, 157 | Levantine pistachio-nut tree *Pistacia vera* Linn | The dried and shelled nuts used as diet | Anaemia, wasting diseases, as roborant and aphrodisiac |
| 220 NILIKĀ *Ci* 26, 12, etc *Syn* Nīlī | Indigo plant *Indigofera tinctoria* Linn | The leaves as ingredient of rectal suppository or enema | Retention of urine, flatus, acute constipation |
| 221 NIMBA *Sū* 3, 3 etc *Syn* Nimbaka, Sutiktaka | Margosa tree *Azadirachta indica* Juss. | Paste or decoction of all parts of the plant, used in prescriptions (external and internal) | Skin diseases, urinary diseases fever, and a large number of other ailments |
| 222 NIRGUṆḌĪ *Sū* 4, 11 etc *Syn* Nīlanirguṇḍī Sindhuvāra | Chaste tree *Vitex negundo* Linn | Paste of the tubers and leaves used in prescriptions (external) | Neuralgic pain in the supraclavical region, sinus fistula, scabies, etc. |
| 223 NIṢPĀVA *Sū* 27, 100, etc *Syn* Śimbī | Goa bean plant *Dolichos lablab* Linn | The seeds cooked as vegetable | Irregular bowel movements |
| 224 PADMAKA *Sū* 3, 24, etc *Syn* Padmagandhi | Bird cherry *Prunus puddum* Roxb | The root stalks or the fruits used in prescriptions (external and internal) | Headache, fever, cough, rheumatic conditions etc |

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| 225 PALĀNDU *Sū* **27,** 175, etc *Syn* Raktakanda | Onion plant *Allium cepa* Linn | The tubers and the stalks in vegetable salad and soups, or taken alone | Hemorrhage, scanty stools, cough, hiccup, etc, as appetizer and aphrodisiac |
| 226 PĀLAÑGKYA *Su* **27,** 100 | Indian spinach *Spinacea oleracea* Linn | The plant cooked as pot-herb | Irregular bowel movements |
| 227 PALĀŚA *Su* **2,** 13, etc *Syn* Kimsuka | Bengal kino tree *Butea frondosa* Roxb | The juice of the roots, bark, leaves, etc in external ointments and ingredient of medicinal ghee | Acute constipation, colic, dysuria, skin diseases, etc |
| 228 PANASA *Su* **27,** 143 etc *Syn* Kaṇṭiphala | Jack fruit tree *Artocarpus integrifolia* Linn | The fully ripe fruits as diet | Intestinal astringent |
| 229 PARPAṬAKA *Su* **27,** 97 etc *Syn* Baratikta Pamsuparyaya Parpaṭa | Trailing rungia *Rangia repens* Neus | Decoction of the leaves, used in prescriptions (internal) | Fever, haemothermia, diarrhoea, etc |
| 230 PARUṢAKA *Su* **4,** 13 etc *Syn* Parusa | Asiatic grewia *Grewia asiatica* Linn | The fruits used alone or in prescriptions decoction of the leaves roots or bark used internally | Fever, acute alcoholism, spleen diseases, cough, rheumatism, etc, as purgative |
| 231 PĀSĀNAMEDĀ *Su* **4,** 15, etc *Syn* Śilāmeda, Pasanabhedaka Pasāṇabhedī | Indian rock foil *Coleus amboinicus* Lour | The dried and powdered leaves with cow's urine (internal) | Urinary stones, as diuretic |
| 232 PAṬALA *Su* **2,** 11, etc *Syn* Paṭali | Trumpet flower tree *Stereospermum chelonoides* De | The decoction or paste of flowers and leaves, used in prescriptions (internal) | Constipation, fever toxic conditions, etc |
| 233 PĀTHĀ *Ci* **3,** 204, etc *Syn* Ekastila, Kucelā, Vṛttaparni | *Stephania hernadofolia* Walp | The roots and leaves used in prescriptions (internal) | Fever, urinary disorders, consumption, piles, etc |
| 234 PAṬOLA *Su.* **3,** 8, etc | Wild snake gourd, or pulbul plant *Trichosanthes dioca* Roxb | Decoction of the leaves used internally the gourds cooked as vegetable | Pruritus, pimples, all types of fever diarrhoea etc as appetizer |
| 235 PATRA *Su* **3,** 29 etc | Cinnamon tree *Cinnamomum tamala* Fr Nees | The dried leaves and bark used in prescriptions (external and internal) | Body odour, fever anaemia, cardiac disorders etc, as an aid to rejuvenation |
| 236 PATTURA *Su* **27,** 100, etc | Coxcomb tree *Celosia argentea* Linn | A decoction of the seeds, used in prescriptions, the plant cooked as pot herb (internal) | Dysuria fever, habitual constipation, etc |
| 237 PAYASYĀ *Su* **4,** 9, etc | White yam *Ipomoea paniculata* R Br | Used as vegetable | Emaciation, debility, loss of voice, etc, as an aid to rejuvenation |
| 238 PHALGU *Su* **27,** 128 etc *Syn* Manjula | *Ficus carica* Linn | A paste of the figs in prescriptions, also cooked as vegetable | Emaciation and debility, urinary stone |

# TABLE 3

## *Medicinal Plants and Plant Products and their Uses—(Contd)*

| Name in Caraka reference, and synonyms if any | Modern and botanical names | Mode of use | Medicinal uses in |
|---|---|---|---|
| 239 PHENILA Ci 29, 110 *Syn* Ariṣṭa | Soap nut tree *Sapindus trifoliatus* Linn or *S mukorossi* Gaertn | A decoction of seeds and fruits used in prescriptions (internal) | Fever, rheumatism |
| 240 PHAÑJĪ Sū 27, 98 | Bind weed *Rivea ornata* Chois | Cooked as pot herb | As an aid to elimination |
| 241 PĪLU Sū 2, 4 etc *Syn* Pīluka | Tooth brush tree *Salvadora persica* Linn | The fruits used alone or in prescriptions (internal) | Rhinitis, fainting, hemicrania, etc, as *purgative* |
| 242 PIPPALĪ Sū 2, 3, etc *Syn* Māgadhī, Vaidehī | Long pepper plant *Piper longum* Linn | The dried flowers, fruits and roots used as ingredients of prescriptions, also as spice in cooking | Used in a large number of diseases, as digestive |
| 243 PLAKṢA Sū 4, 15, etc *Syn* Karparī, Pītana | Yellow barked fig tree *Ficus infectoria* Roxb. | A decoction of the tender leaves, used in prescriptions (internal) | Diarrhoea, haemothermia, seminal weakness, etc |
| 244 PRĀCĪNĀMALAKA Sū 27, 146 | Indian prune *Flacourtia cataphracta* Roxb | The fruits used alone | After effects of poisoning |
| 245 PRAVĀLAJĀTI Ci 3, 207, etc | Chameli tree *Jasminum grandiflorum* Linn | The sprouts or dried flowers used in prescriptions (external) | Coryza nasal haemorrhage, fever, dermatosis, etc |
| 246 PRIYĀLA Sū 3, 21, etc *Syn* Priyālaka Rājātana | Buchanon's mango *Buchanania latifolia* Roxb | The fruits used alone the expressed oil in prescriptions (external) | Rheumatism urticaria, fever, morbid thirst, etc |
| 247 PRIYAṄGU Sū 4, 15 etc *Syn* Priyaka, Priyā | Perfumed cherry *Aglaia roxburghiana* Miq | The fruits used alone the seeds used as cereal | Fever, haemothermia, dermatosis, piles, ear-ache, etc, as intestinal *astringent* |
| 248. PṚŚNIPARṆĪ Sū 2, 11, etc *Syn* Pṛthakparṇī, Siṃhapuṣpī | Pointed leaved uraria plant *Uraria lagopoides* Dc | The *entire plant used in prescriptions* (internal) | Misperistalsis, diarrhoea, fever, cough, consumption, etc |
| 249 PṚTHVĪKĀ Sū 3, 20, etc *Syn* Bṛhadelā, Pṛthvī, Elāki Aindrī, Indrāṇī Sthūlailā | Greater cardamom *Amomum subulatum* Roxb | The dried fruits used alone or in prescriptions (internal) | Hemicrania rhinitis, fever, skin eruptions, etc |
| 250 PŪGA Sū 5, 77 | Betel nut tree *Areca catechu* Linn | The dried nuts used alone | Halitosis, loss of appetite |

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| 251 PUNARNAVĀ *Su* **2,** 12 etc *Syn* Śvetamula Śveta punarnava Vṛścira Tāmalakya | P g weed or Hog weed *Boerhaav a repens* Linn (Variet es *B d ffu e* & *B procumbens*) | A decoction of tl e leaves and roots used in prescript ons (internal) | Constipat on sk n diseases oedema urinary d seases as an aid to rejuvenation |
| 252 RĀJĀDANA *Ci* **30, 97** | Ind an ape flower tree *M musops hexandra* Roxb | Paste of the leaves and fruits used in med cated ghee | Menstrual d sorders |
| 253 RAKTACANDANA *Ci* **30,** 92 | Red sandal wood tree *Pterocarspus santalinus* Linn | A decoction of the leaves or the powdered bark used *internally* | Bleeding p les diarrhoea morb d *menstrual d scharges* |
| 254 RĀSNĀ *Su* **3,** 22 etc *Syn* Nākuli Gandhanakuli Rasanā | Indian groundsel *Vanda roxburghii* Br | Paste *of the roots and rh zomes* used in prescriptions (internal and external) | Rheumatic conditions chest pains, fever oedema heart diseases etc |
| 255 ROHIṆĪ *Su* **4,** 10 etc *Syn* Vivasa Patranga | Ind an red wood tree *Soym da feb fuga* Juss | Decoction of the bark used in prescriptions (internal and ex ternal) | Debil ty chronic skin diseases as a purifier for breast milk |
| 256 ROHISA *Ci* **3,** 267 etc | Geranium grass *Andropogon schoenanthus* Linn | A decoction of the grass and roots used in prescript ons (internal) | Fever abdominal diseases splenic disorders jaundice etc |
| 257 ROHITAKA *Ci* **16,** 81 etc *Syn* Sadapuspa Śalmalika | Wh te cedar *Amoora rohitaka* W & A | The powdered bark, used in decoction as ingred ent of medi cinal ghee etc | Ur nary d sorders enlarged spleen jaundice anaem a intestinal worms etc |
| 258 RUHA *Ci* **23,** *80* etc *Syn* Vrksaruha Śekhara N'lavalli | Wild orch d *Loranthus falcatus* Linn | A *decoction of the leaves used in* prescr ptions ( nternal) | *Cataract night blindness tumours* scab es etc |
| 259 ŚAILEYAKA *Ci* **3** 267 etc *Syn* Śa leya Ś ladadru Śa laka | Lichen *Permel a parlata* Esche | In prescript ons (external and internal) | Fever toxicos s d sorder of the first humor |
| 260 ŚAIREYA *Su* **14,** 32 | Yellow na l dye plant *Barle a pr on tis* Linn | Paste of the leaves as ingredient of hot poultices and steam bath | Stiffness of l mbs enlargement of scrotum sciatica etc |
| 261 ŚAIVALA *Ci* **4,** 103 etc *Syn* Jalaja | Moss *Vall si er a sp ralis* Linn | In prescr ptions (external and internal) | Haemothermia giddiness morbid th rst rheumatism |
| 262 ŚĀLA *Su* **4,** 18 etc *Syn* Sarja Sarjarasa Sarjaka Dirgha śākha Aśvakarna | Sal tree *Shorea robusta* Gaertn | Decoction of the res n and leaves used internally | Urinary disorders pectoral lesions seminal weakness as sedat ve |
| 263 ŚĀLEYA *Ci* **4,** 75 | Common fennel or sweet fennel *Foen culum vulgare* Gaertn or *Trigonella foenum graecum* Linn | Tl e bark made into paste w th sandal wood and used externally or internally | Bronchial asthma |

TABLE 3

*Medicinal Plants and Plant Products and their Uses—(Contd)*

| Name in Caraka, reference and synonyms if any | Modern and botanical names | Mode of use | Medicinal uses in |
|---|---|---|---|
| 264 ŚĀLAPARṆĪ Sū 2 11, etc *Syn* Tṛiparṇī, Sthira, Dīrghamūla, Vidarigandha | Tick trefoil *Desmodium gangeticum* Dc | Decoction of the leaves, used in prescriptions (internal) | Constipation, diarrhoea, oedema, fever, etc |
| 265 ŚALLAKĪ Sū 4, 15, etc *Syn* Kuntarika, Rasāla | Indian olibanum *Boswellia serrata* Roxb | A paste or decoction of the bark alone or soaked in ghee (internal) | Cough, hiccup, nausea, etc |
| 266 ŚĀLMALĪ Sū 27, 99, etc *Syn* Kukkuṭī, Nirgandhapuṣpī Raktapuṣpaka, Moca | Red silk cotton tree *Bombax malabaricum* Dc | The fresh flowers or resin used (internal and external) | Haemothermia, dysentery, rectal prolapse, etc |
| 267 SAMAṄGĀ Ci 4, 76, etc. *Syn* Śamīpatra, Prasāriṇī, Saṃkocinī | Sensitive plant *Mimosa pudica* Linn | Paste or decoction in prescriptions (external and internal) | Haemothermia, piles, diarrhoea, etc |
| 268 ŚAMĪ Sū 25, 49 etc *Syn* Maṅgalya, Śiva, Supatrā, Śaṅkuphalikā | *Prosopis spicigera* Linn | The fruits and bark used in decoction (internal) | As intestinal astringent |
| 269 ŚANA Sū 27, 99, etc *Syn* Kaṭutikta, Tvaksāra | Bengal hemp plant *Crotalaria juncea* Linn | The leaves cooked as vegetable, a decoction of the flowers and roots, used in prescriptions (internal) | Dysentery, irregular bowel movements |
| 270 ŚAṄKHAPUṢPĪ Ci 1/1, 58 etc *Syn* · Medhya, Kiriti, Śaṅkhyakusumā, Śitapuṣpī | Dankuni plant *Canscora decussata* Roem | The leaves used in prescriptions (internal) | Cough, rheumatic conditions, etc |
| 271. ŚAṄKHINĪ Sū 1 81, etc *Syn* Tiktala, Akṣipīḍaka, Yavatiktā | *Ctenolepis cerasiformis* H & K | Decoction of the fruits as ingredient of prescriptions and enema (internal and external) | Disorders of assimilation, as purgative and roborant |
| 272 SAPTAPARṆA Sū 3 4, etc *Syn* Śāradā, Devavṛkṣa, Madagandhā | Dita *Alstonia scholaris* R Br | A paste of the bark, used in ointments | Chronic skin diseases, urinary diseases, oedema, etc |
| 273 SARALA Ci 3, 267, etc | Himalayan pine tree *Pinus longifolia* Roxb | A decoction of the leaves and bark, used in prescriptions (internal) | Fever, loss of appetite, facial paralysis, etc |
| 274 SĀRIVA Sū 4, 10, etc *Syn* Nāgajihvā, Anantā, Anantamūlā | Indian sarsaparilla *Hemidesmus indicus* Br | The leaves used alone in decoction (internal) | Sallow complexion, loss of voice, dysentery, cough, menstrual disorders, etc |
| 275. SARṢAPA Sū 2 3, etc *Syn* Rājakṣavaka, Kaṭṭaka | Rape plant *Brassica campestris* Linn (Varieties—*B sarson*, *B juncea*, *B napus*) | The powdered seeds or the expressed oil used alone or in prescriptions or in suppositories (external and internal) | Rhinitis hemicrania, pruritus, dysuria, coryza, acute intestinal gas formation, etc |

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| 276 ŚATAKUSUMĀ Ci 12 16 | *Peucedenum graveolens* Benth | Extract of the plant as ingredient of enema | Inguinal swelling colic pain menorrhagia piles etc |
| 277 SĀTALĀ Ci 13 128 | *Acacia concinna* Dc | The roots used in prescriptions (internal) | Abdominal diseases poisoning hardened spleen oedema *jaundice etc* |
| 278 SIGRA *Sū* 3 8 *etc* *Syn* Śobhāñjana Sigru Haritaśāka Raktaka | Drum-stick plant *Moringa pterygospermus* Gaertn | The powdered bark root and dried sap used in prescriptions or in steaming mixtures (internal and external) | Anosmia fainting chronic skin eruptions painful piles etc |
| 279 SIMBITAKA *Sū* 17 142 | Apple tree *Pyrus malus* Linn | The fruit used alone | As intestinal astringent |
| 280 ŚIMŚAPA *Su* 1 2 12 etc *Syn* Kṛṣnaśiṃśapa | Rose wood tree *Da berg a s oo* Roxb | The expressed juice of the leaves or tender bark used in prescriptions (internal | Senility debility |
| 281 ŚIRĪṢA *Su* 2 5 etc | S s tree *Alb zz a l bbe k* Benth | Powdered seeds bark and leaves used alone or in prescriptions (external and internal) | Hemicrania urinary anomalies chronic skin diseases toxic conditions etc |
| 282 ŚLEṢMĀTAKA *Sū* 4 11 etc *Syn* Bhukarvudā a Uddālaka Selu | Assyrian plum *Cordia m xa* Roxb or *C obliqua* Willd | The bark made into ointment for local application | Poisoning *for* purification *of* breast milk |
| 283 SOMARĀJĪ *Su* 2 24 etc *Syn* Soma al Somavallikā Soma Candrī | Babchi tree *Psoralea corylifolia* Linn | The seeds cooked in gruel or used in prescriptions (internal | Toxicosis night blindness tumour cataract |
| 284 SPṚKKA C 12 66 etc *Syn* Kuṭila Devaputrika Kuṭika Nakha p spi | Melilot plant *Melilotus indica* All | The pulverized seeds as ingredient of pills | Fever emaciation obstructed and difficult labour |
| 285 ŚṚṄGĀṬAKA C 2 2 14 etc *Syn* Śṛṅgamula Trikoṭa Śṛṅgata | Indian water chestnut *Trapa b p nosa* Roxb | The shelled nuts taken alone or in *prescriptions (internal)* | Impotency chest pain loss of *voice urinary disorders etc* |
| 286 STHAUNEYAKA C 3, 267 etc | Glory tree *Clerodendron fo unatum* Linn | A decoction of the bark used internally | Fever as an emetic |
| 287 SUDHĀ C 5, 107 etc *Syn* Snuk C la Nanda N str ṃśapatraka | Thorny milk hedge or dulk hedge *Euphorbia nerifolia* Linn | The milky juice used in prescriptions (internal) | Oedema piles gastro-intestinal irritations etc |
| 288 SŪKARĪ Ci 9, 46 | *Ta a p nna f da* Fors or *T ntegr fol a* Ker | Starch from the tubers used in medicinal jelly | Epileptic fits insanity |
| 289 SUNISANNAKA C 18, 81 etc *Syn* S māra S tāvarī Parnaka Svastika | Marsilea *Ma l a quad fol a* F gar | *The sprouts cooked as vegetable* | *Cough* spastic condition of the leg muscles etc |

TABLE 3

*Medicinal Plants and Plant Products and their Uses—(Contd)*

| Name in Caraka reference, and synonyms if any | Modern and botanical names | Mode of use | Medical uses in |
|---|---|---|---|
| 290. SURASA *Sū* 3, 8, etc *Syn* Tulasī Bhūtaghnī Kuṭeraka, Suravallī Sulabha, Mañjarikā | Holy basil plant *Ocimum sanctum* Linn | A paste or extract of the leaves, used in prescriptions (internal) | Skin eruptions, fever, splenic disorders, toxicosis, paralysis, etc |
| 291 TĀḌAKA *Sū* 25, 49 | Palmyra palm *Borassus flabellifer* Linn | Various parts fermented into beer-like liquor | Insomnia, depression, anorexia |
| 292 TAGARA *Ci* 6, 27, etc *Syn* Kuṭilla, Kālānusārivā, Dīpana, Śaṭha | Indian valerian *Valeriana hardwickii* Wall | A decoction of the roots used in prescriptions (internal) | Fever, urinary diseases, poisonous bites, etc |
| 293 TĀLAMŪLĪ *Ci* 17, 75 | Black musali plant *Curculigo orchioides* Gaertn | The powdered roots as ingredient of smoking mixture | Cough |
| 294 TĀLĪSA *Ci* 8, 145, etc *Syn* Karicchadā Tālīśapatraka, Tāmalakīpatra | Silver fir tree *Abies webbiana* Lindl | The powdered leaves used in prescriptions (internal) | Cough, anaemia, digestive disorders, colic pain, etc |
| 295 TAMĀLA *Ci* 3, 267, etc. *Syn* Gomedaka, Rāma, Tamālaka, Sukumāraka | Mysore gamboge tree *Garcinia xanthochymus* Hook | A decoction of the fruits and seeds, used in prescriptions (internal) | Skin eruptions, toxic conditions, etc |
| 296 TĀMALAKĪ *Ci* 5, 119, etc *Syn* Viśvaparnī, Bahuphalā, Uncaṭa, Tāmalikā, Cāraṭī | Feather foil plant *Phyllanthus niruri* Linn | A decoction of the plant, used in prescriptions (internal) | Blood poisoning, jaundice herpes etc |
| 297 TĀMBŪLA *Sū* 5, 77, etc *Syn* Bhujangalatā, Nāgavallī, Nāginī, Tāmbulavallī | Betel leaf plant *Piper betel* Linn | The leaves chewed along with betel nut, cloves etc | Halitosis |
| 298 TANDULA *Ci* 4, 73, etc. *Syn* Akṣata | Rice plant *Oryza sativa* Linn | Cereal food, ingredient of gruel, sweetmeat, etc | As vitalizer and roborant |
| 299 TANDULĪYAKA *Ci* 23 198, etc *Syn* Bahuvīryā Kaṇḍerā, Viṣaghna, Mūṣaka | Prickly amaranth *Amaranthus polygamus* Will | The entire plant cooked as vegetable, also as ingredient of enema | Intoxication toxic conditions, internal haemorrhage |
| 300 TAṄKA *Sū* 27, 136 | Pear tree *Pyrus communis* Linn | The fruit used alone | As intestinal astringent |
| 301. TARUṆĪ *Si* 10 31 *Syn* Devakeśara, Bhṛṅgavallabha, Suvṛtta | Cabbage rose *Rosa centifolia* Linn | The petals as ingredient of enema | As above |

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| 302 TILA Su 3, 14, etc Syn Snehaphala | Sesame plant *Sesamum indicum* Linn | The expressed oil from seeds or alkaline ash used in prescriptions (external and internal) | Skin eruptions, pain in vagina, acute constipation, chest complaints, etc |
| 303 TILAPARNI Ci 3, 267, etc. | *Gynandrodropsis pentaphylla* Dc | The entire plant and roots used in prescriptions (internal) | Fever |
| 304 TINDUKA Su 25, 40, etc Syn Nilasāra Tinduka | False mangosteen *Diospyros embryopteris* Pers. | The fruits used alone | Urticaria phlegm excessive bile secretion piles, etc |
| 305 TINISA Ci 1/2 12 etc Syn Citrakrt Śakata | Chariot tree *Ougenia dabbergioide* Benth | The freshly-expressed juice of the bark and stalks used in prescriptions (internal) | Fever debility, as a vitalizer |
| 306 TRAYAMĀNA Ci 3, 208 etc Syn Devabalā Girijā Girija Trayamāṇikā | Zalil plant *Delphinium zalil* Aitch | Decoction of the plant used in prescriptions (internal) | Rigor high body temperature, splenic disorders, chronic skin diseases etc |
| 307 TRNASŪNYA Su 27, 145 etc Syn Laghupuspa Haimī Chinnaruha | Screw pine *Pandanus suberifolium* Linn | The flowers used in decoctions | As antitoxic and febrifuge |
| 308 TRIVRTA Su 4, 13 | Turpeth plant *Operculina turpethum* Manso | The flowers and bark used in prescriptions and as ingredient of enema (external and internal) | Skin eruptions, suppurated wounds fractures, etc, as laxative |
| 309 TUDA Su 27, 135 | Indian mulberry tree *Morinda citrifolia* Linn | A decoction of the roots used in prescriptions (internal) | As liver tonic |
| 310 TUMBI Ci 26 15 etc Syn Iksvāku Alābu Phalinī Pindaphala | Bottle gourd *Lagenaria vulgaris* Scringe | Infusion of the sprouts fruits and seeds in milk used as emetic | Cough, vomiting tachycardia, poisoning etc |
| 311 TURUSKA Ci 28, 153 | Storax plant *Altingia excelsa* Noronha | Liquid exudate as ingredient of medicinal oil (internal) | Cough consumption, debility pectoral lesions etc |
| 312 TUVARA Ci 30, 124 | *Hicennia officinalis* Linn | A paste of the seeds for local application | Offensive smell from the vaginal passage |
| 313 TVAC Su 3, 28 | Cinnamon (bark) *Cinnamomum zeylonicum* Bl | The powdered bark used alone or in prescriptions (internal and external) | Rigor ear ache, eye-ache, discharge from the ear, etc |
| 314 UDAKIRYAKA Su 2, 9 | Prickly weed climber *Caesalpinia digyna* Rottl | A decoction of the root, used internally or in enema | Accumulation of morbid matter in the colon, as purgative |
| 315 UDUMBARA Su 5 22, etc Syn Hemadugdhī Ksīravrksa Krmikanta | Cluster fig tree *Ficus glomerata* Roxb | The powdered root bark used for smoking or as ingredient of prescriptions (internal) | Eye ache ear ache, dental pain, suppurated conditions etc |
| 316 USCATAKA Si 12, 18/7 | Blaffaris plant *Blepharis edulis* Pers | Infusion of the plant in milk used in nutritive enema | Sexual debility |

TABLE 3

*Medicinal Plants and Plant Products and their Uses—(Contd )*

| | Name in Caraka reference, and synonyms if any | Modern and botanical names | Mode of use | Medicinal use, in |
|---|---|---|---|---|
| 317 | UPAKUÑCIKĀ *Ci* 13, 125, etc *Syn* Kṛṣṇajīraka, Bhedinī, Bahugandhā | Small fennel plant *Nigella sativa* Linn | The powdered seeds used in prescriptions (internal) | Acute *constipation*, *colic pain*, anal fistula, poisonous bites, etc. |
| 318 | UPODIKĀ *Sū* 2, 33, etc *Syn* Viśālā, Madāśaka, Upodakī | Malabar spinach *Basella rubra* Linn | As pot herb or as an ingredient of gruel | Intoxication, diarrhoea, rheumatic conditions, etc |
| 319 | UŚĪRA *Sū* 4, 10 etc *Syn* Bahumulaka Indragupta, Sugandhimūla, Jaṭāmeda | Cuscus grass *Andropogon squarrosus* Linn | The powdered leaves or an infusion used in prescriptions (external and *internal*) | Senility, debility, fever, chronic skin diseases, toxicosis, piles, suppurated conditions, etc |
| 320 | UTPALA *Sū* 4 15, etc *Syn* Nīlapatraka, Utpalaka | Blue water lily *Nymphaea stellata* Willd or *N Cyanea* Roxb | The stalks, petals and seeds used in prescriptions (internal and external) | As above |
| 321 | VACĀ *Sū* 2, 9, etc *Syn* Ugragandhā, Jaṭilā, Vijayā, Bhadrā, Ikṣupatrikā | Sweet flag plant *Acorus calumus* Linn | The leaves and stalks in powder form or decoction used in prescriptions (internal) | Skin diseases, haemorrhage, fever, urinary diseases, etc , as purgative, appetizer and vitalizer |
| *322 | BĀLAKA *Ci* 17, 124, etc | Fragrant mallow plant *Pavonia odorata* Willd | A decoction of the root bark as ingredient of *medicinal syrup* or sweetened infusion | Asthma, hiccup, acute nausea, *toxicosis*, etc |
| 323 | VAMŚA *Ci* 21 125 etc *Syn* Veṇu, Tṛṇadhvaja, Duraruhā, Tvakṣāra | Spiny bamboo *Bambusa arundinacea* Retz | A paste or decoction of the leaves or seeds used in prescriptions (external and internal) | Acute *suppurated conditions*, poisonous bites, intestinal worms, excessive fat, etc |
| 324 | VAÑJULA *Sū* 4, 18, etc | Country willow *Salix tetrasperma* Roxb | The leaves used in infusion internally, or in enema | Excessive bile secretion, as sedative |
| 325 | VARAKA *Sū* 27, 14, etc *Syn* Rukṣa, Sthulaphirangaka | Millet *Panicum miliaceum* Linn | Cooked as cereal | As intestinal astringent and tranquilizer |
| 326 | VARTAKA *Sū* 27, 162, etc *Syn* Citraphala, Kaṇṭakinī, Katphala, Vārtāku, Hingulī | Brinjal plant *Solanum melongena* Linn | Cooked as vegetable | Indigestion, anaemia, cough, etc |
| 327 | VARUNA *Ci* 3, 267, etc *Syn* Kumāraka, Aśmaraghna | Sacred caper tree *Crataeva religiosa* Forst | The sprouts and leaves, in decoction, used in prescriptions (external and internal) | Assimilation disorders, piles, etc |

TABLE 4

*Medicinal Substances of Mineral Origin and their Uses*

| Name and reference | Modern equivalent | Mode of use or application | Medicinal uses in |
|---|---|---|---|
| 1 ADRIJATU Ci 16, 78<br>*Syn*<br>ĀŚMAJATU Ci 12, 49 16, 81<br>GIRIJA Ci 1/3, 64 21, 130, etc<br>ŚILĀJATU Sū 21, 24 etc<br>ŚILODBHEDA Ci 15, 113, 30, 90 | Mineral bitumen (exudate from ores) | (a) Internal—in linctus<br>(b) Internal—in decoction<br>(c) Internal—in powder mixture<br>(d) Internal—taken alone<br>(e) Internal—taken mixed with finely powdered diamond and plant juices | (a) Anaemia, oedema, jaundice, urinary diseases, excessive menstrual flow, fever, consumption, emaciation, etc<br>(b) Obesity, imbalance of the body humours, debility, etc<br>(c) Hard cutaneous eruptions, enlarged spleen<br>(d) Intoxication, fainting<br>(e) Malignant skin diseases, as a general remedy for all bodily ailments |
| 2 AGĀRADHŪMA Ci 23, 41, Si 7, 24, 25, 9, 78<br>*Syn*<br>GṚHADHŪMA Sū 3, 5<br>VEŚMADHŪMA Ci 23, 14 | Soot from kitchen smoke | (a) External—in ointment<br>(b) External—as rubbing powder<br>(c) Ingredient of rectal suppositories<br>(d) Internal—in linctus<br>(e) Internal—in mixture | (a) Chronic skin diseases, poisonous bites<br>(b) For extracting venom from poisonous bites<br>(c) Flatulence, constipation, retention of urine<br>(d) Throat affections<br>(e) Poisoning |
| 3 AGRYALAVANA Ci 23, 96<br>*Syn*<br>SAINDHAVA Su 1 88, 5, 12, etc. Vi 8, 141 Śa 8, 34, etc, Ci 1/1, 25, 2/4, 11, etc | Rock salt | (a) External—*used in many different modes of application*<br>(b) Internal—used in many types of prescriptions | (a) & (b) For a very large number of pathological conditions and as a general tonic |
| 4 ĀLA Su 1, 70 3, 5, etc, Ci. 9, 66, 18, 69, etc<br>*Syn*<br>HARITĀLA Sū 5, 26 Ci 7, 114, 26, 196 | Yellow orpiment (arsenious sulphide) | (a) Ingredient of *medicinal cigars*<br>(b) External—in medicated oil<br>(c) External—ingredient of oral gargle | (a) Imbalance of the first and third humors<br>(b) Parasitic infections of the skin, eruptions and itchings<br>(c) Mouth and throat diseases |
| 5 AMṚTĀSANGA Ci 7, 114<br>*Syn*<br>TUTTHA Sū 3, 12 Ci 7, 114, *etc* | Blue vitriol (copper sulphate) | (a) External—in dusting powder<br>(b) External—in ointment | (a) Ringworm, scabies, herpes, etc<br>(b) Exanthema, cutaneous eruptions, eye affections, piles, eczema etc |
| 6 AÑJANA Sū. 1, 70, 3, 5<br>*Syn*<br>SAUVĪRĀÑJANA Su 5, 15 | Black sulphide of antimony | (a) External—in ointment | Leucoderma fistula piles, dimness of vision eye-diseases, etc |

| | | | |
|---|---|---|---|
| 7 ANŪPALAVAṆA *Vi* 8, 141 | Salt obtained by evaporations of well-water | Ingredient of rectal enema | As purgative |
| 8 AŚMAMAYĪ ŚILĀ *Su* 14, 26, 47, 58, *Śa* 8, 34, 42, *In* 12, 20 *Ci* 1/3, 63, 5, 17, etc | Slab of stone | Used for hot fomentation (covered with silk, cotton etc) | Hard cutaneous swellings, abscess, varicocele, etc |
| 9 AYAS *Ci* 21, 131 | Iron | Used for hot compress or fomentation | Hard cutaneous swellings, varicocele |
| 10 ĀYASA *Su* 1, 131, 21, 23, *Śā* 8, 34, *Ci* 7, 88, 12, 21, etc<br>*Syn*<br>KĀLALOHARAJAS *Su* 21, 23, *Ci* 7, 171<br>KṚṢṆĀYASA *Ci* 1/2, 49<br>KĀLĀYASARAJAS *Ci* 1/1, 58 | Finely powdered iron or specially prepared iron | (*a*) External—in dusting powder<br>(*b*) External—ingredient of poultice<br>(*c*) External—in ointment<br>(*d*) External—in hair-lotion<br>(*e*) Internal—used in prescription after prolonged contact with cow's urine<br>(*f*) Internal—in linctus<br>(*g*) Internal—in (acid) liquid mixture<br>(*h*) Internal—in pills | (*a*) Cutaneous eruptions<br>(*b*) Inflammation<br>(*c*) Blindness, unseparated eyelids, tumours, piles<br>(*d*) As hair tonic and hair dye<br>(*e*) Leucoderma, jaundice, urinary disorders, anaemia, heart diseases, anal fistula, etc<br>(*f*) Toxicosis, asthma, cough hiccup, etc<br>(*g*) Obesity, flatulence, debility, etc<br>(*h*) Disorders of chyme formation, spleen disorder, jaundice, anaemia oedema gastro intestinal irritations, lithiasis, etc |
| 11 AYOMALA *Ci* 16, 74<br>*Syn*<br>MAṆḌŪRA *Ci* 16, 93, 103 | Iron rust | (*a*) Internal—in linctus<br>(*b*) Internal—in prescription after prolonged treatment with cow's urine | (*a*) Toxic conditions with fever, spastic paraplegia epilepsy, urinary disorders, skin diseases, etc<br>(*b*) Anaemia, dropsy, oedema, urinary disorders, jaundice, dysentery, intestinal parasites, etc |
| 12 BĀLUKA *Vi* 8, 141 | Salt from saline sand | Ingredient of rectal enema | For relief in inflammatory conditions |
| 13 BHṚṢṬALOṢṬA *Ci* 20, 30<br>*Syn*<br>PAKVALOṢṬA *Ci* 4, 80, 22, 42 | Lump of baked clay | Medication of drinking water by prolonged immersion | Haemothermia, biliousness |
| 14 DVE LAVAṆE *Ci* 5, 80, 26, 12, 101 | Rock salt mixed with alkaline salts | (*a*) Ingredient of rectal suppository<br>(*b*) Internal—in powder mixture | (*a*) Acute constipation<br>(*b*) Pain in gastric region or rectal area, piles, spleen disorders, pain after meals, throat spasms, etc |
| 15. DVE TUTTHE *Ci* 7, 108 | The two vitriols | External—in medicated oil | Itching eczema, dermatosis |

TABLE 4

*Medicinal Substances of Mineral Origin & their Uses—(Contd.)*

| Name and reference | Modern equivalent | Mode of use or application | Medicinal uses in |
|---|---|---|---|
| 16. GAIRIKA *Sū* 3, 5, *Ci* 3, 73, 25, 117; 26, 210, etc | Chalk of reddish-brown colour | (*a*) External—in ointment<br>(*b*) External—in mud pack<br>(*c*) Ingredient of oral gargles<br>(*d*) Internal—in liquid mixture<br>(*e*) Internal—infusion in water | (*a*) White leprosy, depigmentation of the skin, ringworm, exanthema, piles, etc.<br>(*b*) Spreading skin infections<br>(*c*) Halitosis, inflammation of mouth and throat, dental caries, diseases of the gum, etc.<br>(*d*) Haemothermia, bronchial asthma, bleeding nose, etc.<br>(*e*) Blood dysentery, menstrual disorders, diseases of the uterus |
| 17 GANDHAKA *Ci* 7, 71<br>*Syn*<br>TELITAKA *Ci* 7, 70<br>SAUGANDHIKA *Sū* 3, 10, *Ci* 17, 126 | Sulphur | (*a*) External—in dusting powder<br>(*b*) Internal—in linctus<br>(*c*) Internal—suspended in acid plant juices | (*a*) Ringworm, itches herpes, scabies<br>(*b*) Asthma, cough, hiccup<br>(*c*) Chronic skin diseases |
| 18 GARAMANI *Ci* 23, 252 | The 'poison' gem | External—to be kept in contact with the skin | As an antidote for poisoning |
| 19 HEMAN *Vi* 8, 9<br>*Syn*<br>SUVARNA *Sū* 1, 70, 5, 74<br>KANAKA *Sū* 3, 16, 8, 19, etc<br>KAÑCANA *Ci* 1/4, 59 | Gold | (*a*) Material for catheters, enema tubes tongue scrapers, etc.<br>(*b*) Medication of drinking water by prolonged immersion<br>(*c*) Internal—ingredient of medicated ghee | (*b*) Haemothermia<br>(*c*) As a vitalizing tonic and a panacea in all bodily ailments |
| 20 IṢTAKA CŪRNA *Ci* 27, 49 | Brick powder | External—as powder for massage | Spastic paraplegia |
| 21. KĀCA *Ci* 27, 125 | Glass or glass like mineral | Internal—powdered and used in linctus | Hiccup, cough, asthma |
| 22. KĀLALAVANA *Sū* 27, 303, *Vi* 8, 141, *Śā* 8, 34, *Ci* 13, 134<br>*Syn*<br>KĀLOTTHALAVANA *Ci* 15, 171 | Black salt | (*a*) Internal—taken alone or dissolved in acid fruit juices<br>(*b*) Internal—ingredient of medicated ghee | (*a*) As digestive, laxative and general tonic<br>(*b*) Loss of appetite |

| | | | |
|---|---|---|---|
| 23 KAÑCANAGAIRIKA *Ci* **20, 32**<br>*Syn*<br>KĀMŚRĪ *Ci* **23,** 54 **30,** 121 | Yellow ochre | (*a*) Internal—infusion with water<br>(*b*) Internal—in piles | (*a*) Imbalance of the second and third humors<br>(*b*) Fever, toxicosis |
| 24 KĀMSYA *Śa* **8,** 9 *Ci* **24,** 154 *Si* **3, 7**<br>*Syn*<br>RĪTI KĀMSYA *Su* **3, 7** | Bronze or bell metal | Material for enema tubes etc | |
| 25 KĀSĪSA *Su* **3,** 5 10 *Ci* **7,** 102 etc, **21,** 126 etc<br>*Syn*<br>PAUṢPĀÑJANA *Ci* **26,** 250 | Green vitriol (ferrous sulphate) | (*a*) External—in ointment<br>(*b*) External—in eye-ointment<br>(*c*) External—in dusting powder<br>(*d*) External—ingredient of poultice<br>(*e*) External—in medicated oil for local application | (*a*) Leucoderma alopecia, fistula<br>(*b*) Gradual loss of vision<br>(*c*) Spreading inflammation, discoloured skin skin diseases<br>(*d*) Eye-diseases<br>(*e*) Slimy discharges from the vagina, displaced or prolapsed uterus painful and congested uterus |
| 26 KṚṢNAMṚT *Ci* **19,** 82 **22,** 44<br>*Syn*<br>KṚṢNAMṚTTIKĀ *Su* **27,** 200 *Ci* **19, 64** | Black clay | Internal—in aqueous infusion | Excessive thirst haemorrhage |
| 27 KṚṢNASIKATĀ *Ci* **22,** 44 | Black sand | Medication of drinking water by prolonged immersion | Excessive thirst |
| 28 LAVANĀNI CATVĀRI *Ci* **15,** 111 | Mixture of four salts | (*a*) Internal—in pills<br>(*b*) Internal—as ingredient of powder | (*a*) Spleen diseases jaundice loss of appetite emaciation etc<br>(*b*) Cough asthma heart diseases, etc |
| 29 LAVANA PAÑCAKA *Su.* **1,** 75 *Ci* **13,** 127 **15,** 106 etc | Mixture of five salts | (*a*) Ingredient of rectal enema<br>(*b*) External—as massaging powder<br>(*c*) Internal—in medicinal powder<br>(*d*) Internal—in pills<br>(*e*) Internal—in medicated ghee<br>(*f*) Internal—in liquid mixture | (*a*) Constipation<br>(*b*) For inducing bleeding in poisonous bites<br>(*c*) Spleen diseases flatulence, indigestion short breath etc<br>(*d*) Coryza heart block<br>(*e*) Cough consumption oedema inguinal swelling heart diseases etc<br>(*f*) Dysentery anaemia gastro-intestinal irritation etc |
| 30 LAVANATRAYA *Ci* **15,** 177, 183 **20,** 25, *Si* **9,** 18 | Mixture of three salts | (*a*) Internal—in medicated ghee<br>(*b*) Internal—in pills<br>(*c*) Internal—in liquid mixture | (*a*) & (*b*) Colic pain misperistalsis, piles dysentery, etc<br>(*c*) Tetanus convulsions cardiac seizures |

11

TABLE 4

*Medicinal substances of Mineral Origin & their Uses—(Contd )*

| Name and reference | Modern equivalent | Mode of use or application | Medicinal uses in |
|---|---|---|---|
| 31 LOHA *Ci* 25, 103, etc | Metal (iron) | Material for surgical instruments | - |
| 32 LOHITAMṚT *Ci* 23, 101 | Red clay | Internal—in pills | Poisoning, oedema, indigestion, intestinal worms, etc |
| 33 MĀKṢIKA *Ci* 7, 70, 16, 76, etc *Syn* TĀPYA *Ci* 16, 78, 26, 250 | Iron pyrites | (*a*) External—in eye ointment (*b*) Internal—in pills after prolonged immersion in cows' urine (*c*) Internal—in linctus | (*a*) Gradual loss of vision (*b*) Chronic skin diseases (*c*) Anaemia, irregular fever, urinary disorders, emaciation, toxicosis, jaundice, etc |
| 34 MANAHŚILĀ *Sū* 1, 70, 3, 5, 5, 28, etc , *Si* 7, 117, 17, 77, etc | Realgār (arsenic sulphide) | (*a*) External—in dusting powder or in ointment (*b*) Ingredient of medicinal cigar (*c*) Internal—in linctus, pills or medicated ghee | (*a*) Chronic skin diseases, piles, leucoderma, baldness, alopecia leprosy, exanthema, etc (*b*) Migraine, hemicrania, earache, diseases of the gum, drowsiness, etc (*c*) Oedema dysentery, toxicosis, night blindness, carbuncle, etc |
| 35 MANI *Sū* 1, 70, 6, 31, 8, 19, *Ni* 7, 16, *Ci* 26, 250, etc *Syn* RATNA *Sū* 8, 19, *In* 1/2, 33 | Precious stone | External—in eye salve as fine powder | Eye diseases, failing vision |
| 36 MAULAKA *Vi* 8, 111 | Black salt | Ingredient of rectal enema | For rheumatic conditions |
| 37 MṚT *Sū* 9, 13, 18, 6 *Śā* 1, 43, *Ci* 4, 79, 16, 121, etc | Clay | (*a*) Internal—ingredient of mixture (*b*) Internal—in aqueous suspension | (*a*) Geophagism or abnormal hankering for clay (*b*) Haemothermia |
| 38 O(A)UDBHIDA *Sū* 1, 188, 27, 303, *Vi* 8, 141, *Ci* 15, 85 26, 227 | Fossil salt | (*a*) Ingredient of rectal enema (*b*) Internal—in medicated ghee (*c*) Internal—in emulsion with oil | (*a*) Constipation (*b*) Deafness, infected ear passage, discharge of pus from ears, etc (*c*) Intestinal worms |
| 39 PAKYA *Ci* 15, 85, 109 | Artificially prepared salt | Internal—in medicated ghee | Indigestion, dysentery, etc |

| | | | |
|---|---|---|---|
| 40 PAṄKA *Ci* **22,** 37 *Su* **18,** 6<br>*Syn*<br>PUṢKARINĪMṚT *Ci* **4,** 104 | Slime | As mud pack for application to the skin | Sunburn high fever etc |
| 41 PĀṂŚU *Ci* **23,** 38 174 | Powdered earth (clay) | External—for local application | Poisonous bites |
| 42 PĀṂŚUJA *Su* **27,** 304, *Vi* **8,** 141 | Salt prepared from saline clay | Internal—in mixtures | Loss of appetite flatulence rheumatism |
| 43 RAJATA *Vi* **8,** 9 11 *Ci* **1/1,** 58 **3,** 23 etc<br>*Syn*<br>RŪPYA *Su* **5,** 74 *Ci* **16,** 78 etc | Silver | (*a*) Material for fine tubes and catheters<br>(*b*) Internal—in linctus as fine powder | (*b*) Asthma cough hiccup emaciation loss of appetite, etc |
| 44 ROMAKA *Vi* **8,** 141 *Ci* **15,** 85<br>*Syn*<br>VIḌA *Su* **1,** 88 **27,** 302 *Śa* **8,** 34 *Ci* **5,** 69 **15,** 85 etc | Salt obtained from saline soils | (*a*) Ingredient of rectal enema<br>(*b*) External—in medicated oil<br>(*c*) Internal—in medicated ghee<br>(*d*) Internal—in fermented mixture<br>(*e*) Internal—in aqueous infusion<br>(*f*) Internal—in powder mixtures<br>(*g*) Internal—dissolved in acid fruit juices | (*a*) As a purgative in loss of appetite<br>(*b*) Affections of the ear passage and of hearing<br>(*c*) & (*d*) Enlarged spleen painful movement of bowels mucus in stool general weakness, etc<br>(*e*) Cough asthma<br>(*f*) Hard skin nodules enlarged spleen anaemia dysentery, etc<br>(*g*) Chronic alcoholism |
| 45 RŪPYAŚILĀJATU *Ci* **1/3,** 58 | Mineral bitumen from ores of silver | Internal—as powder | Imbalance of the first and third humors |
| 46 SĀMUDRA *Su* **1,** 89 *Vi* **8,** 141<br>*Syn*<br>SĀMUDRAKA *Su* **27,** 304 | Sea salt | (*a*) Ingredient of rectal enema<br>(*b*) Internal—in powder mixtures | (*a*) Imbalance of the humors (as tranquillizer)<br>(*b*) Indigestion loss of appetite |
| 47 SARVALOHA *Ci.* **1/3,** 46 | Tin lead iron, copper and silver | Internal—as finely-divided powders boiled with myrobolan juice | As general tonic |
| 48 SĪSAKA *Śa* **3,** 16, *Ci* **7,** 88, **17,** 126 | Lead | (*a*) Internal—in pills, after prolonged immersion of the powdered metal in cow's urine<br>(*b*) Internal—in linctus as powder | (*a*) Cutaneous eruptions<br>(*b*) Asthma cough, hiccup |
| 49 SAURĀṢṬRĪ *Ci* **7,** 114, **15,** 138, **30,** 79, 98 | Alum | (*a*) External—in medicated oil<br>(*b*) Internal—in linctus | (*a*) Intestinal worms pruritus, leucorrhoea erosion of the cervix, prolapsed uterus, etc<br>(*b*) Gastric disorders, enlarged spleen, colic pain, jaundice, anorexia etc |

TABLE 4

*Medicinal substances of Mineral Origin & their Uses—(Contd )*

| Name and reference | Modern equivalent | Mode of use or application | Medicinal uses in |
|---|---|---|---|
| 50 SAUVARCALA *Sū* 1, 88, 28, 20, etc., *Ni* 8, 14 *Śā* 8, 34 *Ci* 5, 69, 8, 142, etc , *Ka* 7, 53 *Si* 7, 17, 9, 19, etc. | Salt obtained by boiling alkali with myrobolans | (*a*) External—in various modes of application<br>(*b*) Internal—in a large number of prescriptions | (*a*) & (*b*) Used in a large number of pathological conditions |
| 51 SPHAṬIKA *Ci* 1/4, 22, 17, 125 | Quartz | (*a*) Internal—in linctus as fine powder<br>(*b*) Internal—in medicated ghee | (*a*) Asthma, cough, hiccup<br>(*b*) As a general tonic |
| 52 SUVARNAMĀKṢIKA *Ci* 7, 71 | Pyrites ore | Internal—the powder after digestion with acid juices | A general remedy in all diseases |
| 53 TĀMRA *Ci* 21, 231 | Copper | Material for hot fomentation | Varicocele, hard cutaneous swellings |
| 54 TĀMRARAJAS *Ci* 1/1, 58, 1/4, 22, 17, 126, 24, 246, etc | Finely divided copper | (*a*) External—in eye-ointment<br>(*b*) Internal—in linctus<br>(*c*) Internal—in mixture after digestion with plant juices | (*a*) Eye diseases<br>(*b*) Accumulation of waste matter in stomach, hiccup<br>(*c*) General weakness and debility |
| 55 TĀMRAŚILĀJATU *Ci* 1/3, 58 | Mineral bitumen from ores of copper | Internal—as powder | As a vitalizing tonic |
| 56. TĪKṢNĀYASA *Ci* 1/3, 16 | Tempered iron or steel | Internal—in pills after digestion of thin foils of the metal in acid juices | As a vitalizing tonic |
| 57 TILAKṢĀRA *Sū* 3, 14 | Alkaline ash from sesame seeds | External—in ointment | Ringworm, pruritus, papules on the skin surface |
| 58. TRAPU *Sū* 5, 74, *Ci* 7, 88, *Si* 3, 7 | Tin | (*a*) Material for enema tube, etc<br>(*b*) External—as ingredient of dusting powder | (*b*) Cutaneous eruptions |
| 59 UDBHIDA-SAINDHAVA *Sū*. 1, 88, 27, 303, *Ni* 8, 141; *Ci* 15, 85, 26, 227 | Salt obtained from ashes of marine plants | (*a*) In rectal enema<br>(*b*) Internal—in medicated ghee<br>(*c*) Internal—in oil emulsion | (*a*) Constipation, colic pain, enlarged spleen, abdominal diseases, etc<br>(*b*) Diseases of the eye, mouth and ear |

| | | | |
|---|---|---|---|
| 60 VAIDURYA Ci 1/4, 22 4, 79 etc | Beryl (cat s eye) | (a) External—in eye-o ntment as powder<br>(b) Internal—in linctus<br>(c) Internal—in aqueous infusion | (a) Eye-diseases<br>(b) Asthma cough, h ccup<br>(c) Haemotherm a |
| 61 VAJRA Ci 7, 22 23, 252 | D amond | Internal—finely powdered and mixed with plant ju ces | *As a general remedy for all a lments* |
| 62 VALMĪKA MṚTTIKĀ Ci 27, 49 51, 54 | *The deposit of* white-ant h lls | External—as massaging powder | Spastic paraplegia |
| 63 VIṢAMŪṢIKĀ Ci 23, 253 | The anti poison gem | External—to be worn in contact with *the skin* | Antidote for po soning |
| 64 VARĀṬAKA Ci 26, 224 | Lime obta ned by burning cowr e shells | Internal—as powder suspended in medicated oil | Ear ache |

## Table 5
### *Cereals and Legumes*

| | |
|---|---|
| **ŚŪKADHĀNYA-VARGA** (Cereals) | |
| (1) Varieties of rice — | *Raktaśali, Mahaśali, Kalama, Śakunahrta, Turnaka, Dirghaśuka, Gaura, Panduka, Langula, Śaribhakhya, Promodaka, Patanga, Tapaniya, Yavaka, Havana, Pamsuvapya, Naisadhaka, Svastika, Gaurasvastika, Varaka, Uddalaka, Cina, Śarada, Ujjvala, Dardura, Gandhana, Kurucinda, Vrihi* and *Patala* (*Su* 27, 6-13) |
| (2) Varieties of millet — | *Śyamaka, Hastiśyamaka, Ambhasiśyamaka, Nivara, Toyaparni, Gavedhuka, Prasantika, Lauhitya, Anu, Priyangu, Mukunda, Jhintigarmuti, Varuka, Varaka, Śivira, Utkata,* and *Jurnahva* (*Sū* 27, 16-18) |
| (3) Other varieties of corns — | *Yava* (barley), *Venuyava* (bamboo-seeds), *Godhuma* (wheat), *Nandimukhi* and *Madhuli* (*Su* 27, 19-22) |
| **ŚAMĪDHĀNYA-VARGA** (Legumes) | *Mudga* (green gram), *Masa* (black gram), *Rajamasa* (black-eye pea), *Kulattha* (horse gram), *Madhustaka* (moth gram), *Canaka* (chick pea), *Masura* (lentil), *Saharenava* (common pea), *Tila* (sesame), *Simbi, Ādaka* (pigeon-pea), *Saidagaja, Avalguja, Kakanda* (sword bean), *Uma* (linseed), *Ātmagupta* (cowage) (*Su* 27, 23-34) |

## Table 6
### *Natural Waters*
**JALA-VARGA** *Sū* 27, 197-216

| Name and reference | English translation |
|---|---|
| ANŪPA-JALA | Water of fresh water lakes |
| BĀPĪ-JALA | Water of artificial tanks |
| HAIMA JALA | Water from melting ice or snow |
| KŪPA-JALA | Well water |
| NADYA-JALA | River water |
| PRASRAVANA-JALA | Water of surface springs and geysers |
| ŚAILA-JALA | Water of hill or mountain springs |
| SAROJALA | Water of ponds |
| ŚIŚIRA | Dew |
| TAḌĀGA-JALA | Water of artificial lakes |
| TOYADA-JALA | Rain water |
| TUṢĀRA | Snow |
| VARUṆĀLAYA-JALA | Sea water |

# TABLE 7

## *Sugar cane Derivatives & Types of Honey*

| Name and reference | English translation |
|---|---|
| **RASA VARGA,** *Su* **27,** 238-242 | Sweet juices and their derivatives |
| AVAŚOSITA RASA | Sugar-cane juice boiled down to half one third or one fourth of its original bulk |
| DHAUTA GUḌA | Clarified *guda* |
| GUḌA | Dark brown semi-crystallized crude sugar |
| IKSU RASA | Sugar cane juice |
| KHANḌA ŚARKARĀ | Candied sugar |
| KṢUDRA GUḌA | Dark coloured treacle (or molasses) |
| MADHU ŚARKARĀ | Crystallized honey |
| MATSYA PINDAKA | Crude granulated sugar |
| PAUNḌRAKA | Sugar cane juice (clarified) |
| ŚARKARĀ | Crystallized cane sugar |
| VAMŚAKA | Unclarified sweet juice of the Camel thorn (*Alhazi mauro-rum*) |
| YĀNTRIKA RASA | Mechanically pressed cane juice |
| **MADHU VARGA** *Su* **27,** 243 | Honeys |
| BHRĀMARA | Honey of the *Apis dorsata* |
| KSAUDRA | Dark coloured honey from unspecified source |
| MĀKSIKA | Bee honey |
| PAUTTIKA | Insect or wasp honey |

## TABLE 8
### *Milk and Milk-products*
**PAYOVARGA** *Sū* **27, 217-236**

| Name and reference | English translation |
|---|---|
| ĀVIKA GHṚTA | Clarified butter prepared from sheep's milk |
| ĀVIKA-PAYAS | Sheep's milk |
| CHĀGA-GHṚTA | Clarified butter prepared from goat's milk |
| CHĀGA-PAYAS | Goat's milk |
| DADHI | Sour milk(curds or koumiss) |
| EKAŚAPHA-PAYAS | Milk from animals with uncloven hooves |
| GAVYA GHṚTA | Clarified butter from cow's milk |
| GAVYA-PAYAS | Cow's milk |
| GHṚTA | Clarified butter from any source, or any preparation containing a major proportion of clarified butter |
| HASTINĪ-PAYAS | Elephant's milk |
| KILĀTA | Concentrated milk |
| MAHIṢĪ-GHṚTA | Clarified butter from buffalo-milk |
| MAHIṢĪ-PAYAS | Buffalo's milk |
| MAṆḌA | Casein |
| MAṆḌAKA | Immature curds (partly souredmilk) |
| MĀNUṢA PAYAS | Human milk |
| MORAṬA | Thickened milk |
| NAVANĪTA | Butter |
| SARA | Coagulum of milk |
| TAKRA | Dilute buttermilk |
| TAKRAPIṆḌAKA | *Coagulated (solid portion of)* buttermilk |
| UṢṬRĪ-PAYAS | Camel's milk |

# TABLE 9
## *Vegetable Oils*
**TAILA-VARGA** Su **27,** 291 293

| *Name and reference* | *English translation* |
|---|---|
| ATASYA TAILA | Linseed oil |
| ERAṆḌA TAILA | Castor oil |
| KUSUMBHA TAILA | Safflower oil |
| PRIYĀLA TAILA | Oil of the *Buchanania Latifolia* |
| SARṢAPA TAILA | Mustard oil |
| TILA TAILA *Su* **13** 12 | Sesame (*Sesamum indicum*) oil |

## Table 10
### *Alcoholic Beverages*
### *MADYA-VARGA* Sū 27, 179 193

| Name and reference | English translation |
|---|---|
| ABHINAVA MADYA | Freshly fermented liquor |
| ĀKṢIKI | Fermented liquor from the chebulic myrobolan |
| AMLAKĀÑJIKA, Ci 5, 77<br>*Syn*<br>*Kañjika*<br>*Dhanyamla*, Sū 15, 7<br>*Tuṣodaka* | Sour fermented liquor from rice gruel |
| ĀRANĀLA, Ci 15, 116 | Sour gruel from fermented boiled rice |
| ARIṢṬA | Distilled wine for medicinal use |
| ĀSAVA | General name for distilled wine |
| ĀSUTA, Ci. 15, 121 | Brewed mixture containing *Soma* plant juice |
| GAUḌA | Rum prepared from crystallized brown sugar |
| JAGALA | Fermented liquor prepared from unboiled rice |
| MADHULIKA | Clear fermented liquor from *Mohua* fruits |
| MADHUSUKTA Ci 26, 227 | Fermented liquor from a mixture of sugar-cane juice, dark brown crude sugar and boiled rice sweetened with honey |
| MADHVĀSAVA | Rum prepared from honey |
| MĀDHVĪKA | Fermented liquor sweetened with honey |
| MADYA<br>*Syn*<br>*Sura* | Fermented liquor from barley, etc. |
| MADIRĀ<br>*Syn*<br>*Suramanda*<br>*Varunimanda*, Ci 5, 92 | Distilled wine containing least amount of water (of high alcohol content) |
| MAIREYA | Mixed wine containing equal quantities of rum and fermented (undistilled) wine |
| MṚDAUKA | Fermented liquor from grape juice |
| PAKVARASA<br>*Syn*<br>*Sidhu*, Vi 8 140 | Fermented liquor from mixture of thickened cane juice and dark brown crude sugar |
| *Prasanna*, Ci 26 18 | Clear decanted layer of fermented liquors |
| RASĀSAVA | Fermented liquor of sugar-cane juice |
| ŚĀRKARĀ | Fermented liquor from cane sugar solution |
| SAUVĪRAKA | A type of fermented liquor |
| ŚĪTARASIKA | Fermented liquor from cold (unboiled) sugar-cane juice |
| SUKTA, Ci 29, 9 | Fermented liquor from mixture of cold sugar cane juice and boiled rice |
| SURĀSAVA | Wine distilled from fermented liquor |
| TUṢĀMBU | Sour fermented liquor from barley gruel |

## TABLE 11-A
### *Anatomical Terms—General*

| Name and reference | Modern name |
|---|---|
| 1 ADHARAGUDA, *Śa* **7**, 10 | Anus |
| 2 AKSI, *Śa* **7**, 11 | Eye |
| 3 AKṢIKANIKĀ, *Śa* **7**, 11 | Pupils |
| 4 AKṢIKŪṬA *Śa* **7**, 11 | Eye balls |
| 5 AKSIVARTMA, *Śa* **7**, 11 | Eye lids |
| 6 ĀMĀŚAYA, *Śa* **7**, 10 | Stomach |
| 7 AMSA, *Vi* **8**, 117 | Shoulder blade |
| 8 ĀNANA, *Vi* **8**, 117 | Face |
| 9 ANGULA, *Su* **26**, 67 | Finger |
| 10 ANUṢASIRĀ, *Śa* **7**, 13 (29 956 in number) | Capillaries |
| 11 ARATNI, *Vi* **8**, 107 | *Bones of the forearm* |
| 12 ASRKDHARA, *Śa* **7**, 4 | Capillary |
| 13 ĀSYA, *Vi* **8**, 117 | Mouth |
| 14 AVATTA *Śa* **7**, 11 | *Base of the skull* |
| 15 BASTIŚIRSA, *Vi* **8**, 117 | Lower abdomen |
| 16 BHAGA, *Vi* **8**, 117 | Vagina |
| 17 CIBUKA, *Vi* **8**, 107 | *Chin* |
| 18 DANTA, *Śa* **7**, 11 | *Tooth* |
| 19 DANTAVEṢṬAKA *Śa* **7**, 11 | Gums |
| 20 DHAMANĪ, *Vi* **5**, 9 (200 in number) | *Artery* |
| 21 GALAŚUNDI, *Śa* **7**, 11 | Tonsils |
| 22 GAṆḌA, *Vi* **8**, 105 | Cheek |
| 23 GARBHĀŚAYA *Śa* **3**, 3 | *Uterus* |
| 24 GOJIHVIKĀ *Śa* **7**, 11 | Tongue |
| 25 GRĪVĀ, *Su* **20**, 8 | Front of the neck |
| 26 GUDA, *Su* **27**, 275 | Rectal passage |
| 27 GULPHA, *Vi* **8**, 107 | Ankle |
| 28 HANU, *Vi* **8**, 105 | Jaw |
| 29 HASTA, *Vi* **8**, 117 | Hand |
| 30 HṚDAYA, *Su* **17**, 3 | Heart |

# TABLE II A
## *Anatomical Terms—General (contd.)*

| Name and reference | Modern name |
|---|---|
| 31 JAṄGHĀ *Sū* 16, 8 | Calf |
| 32 JATRU *Vi* 8, 107 | *Collar bone* |
| 33 JĀNU *Vi* 8, 107 | Knee |
| 34 JARĀYU *Śā* 3, 6 | Womb |
| 35 KAKṢA *Vi* 8, 105 | Arm pit |
| 36 KANDARĀ *Sū* 11, 48 | Sinew |
| 37 KARṆAPATRAKA *Śā* 7, 11 | Outer ear |
| 38 KARṆAŚAṢKULIKĀ *Śā* 7, 11 | Inner ear |
| 39 KAṬI *Vi* 8, 117 | Waist |
| 40 KEŚA, *Sū* 20, 11 | Hair |
| 41 KEŚABHŪMI *Sū* 20, 11 | Scalp |
| 42 KLOMAN *Sū* 17, 93 | Broncho-pneumonial tract |
| 43 KOṢṬHĀṄGA *Śā* 7, 10 | Alimentary canal |
| 44 KṚKĀṬIKĀ *Vi* 8, 105 | Nape of neck |
| 45 KṢUDRĀNTRA, *Śā* 7, 10 | Small intestines |
| 46 KUKṢI *Sū* 17, 93 | Abdomen |
| 47 KUKUNDARA *Śā* 7, 11 | Flanks |
| 48 LALĀṬA *Vi* 8, 105 | Forehead |
| 49 LOMAN *Vi* 8, 106 | Body hair |
| 50 LOMAKŪPA, *Śā* 6, 23 | Skin pore |
| 51 MĀṂSA *Sū* 17, 82 | Muscles (flesh) |
| 52 MARMA *Sū* 11, 49 (107 in number) | Viscera vital parts |
| 53 MASTIṢKA *Si* 9, 80 | Cranial matter (brain) |
| 54 MEDAS *Sū* 16, 9 | Adipose tissue |
| 55 MEḌHRA, *Sū* 27, 275 | Urethra |
| 56 MŪRDHAN *Sū* 11, 48 | Cranium (skull) |
| 57 MŪTRĀŚAYA *Vi* 8, 117 | Urinary bladder |
| 58 NĀBHI *Sū* 17, 93 | Navel |
| 59 NĀSĀ *Śā* 8, 19 | Nose |
| 60 NĀSĀPUṬA *Śā* 8, 19 | Nostrils |

## TABLE 11-A
*Anatomical Terms—General (contd )*

| Name and reference | Modern equivalent |
|---|---|
| 61 NITAMBA, *Śa* **7,** 11 | Buttocks |
| 62 OṢṬHA, *Śā* **7,** 11 | Lips |
| 63 PĀDA, *Su* **26,** 67 | Feet |
| 64 PĀDAHṚDAYA, *Śa* **7,** 11 | Soles of the feet |
| 65 PĀDĀṄGULA, *Su* **26,** 67 | Toes |
| 66 PAKVĀŚAYA, *Su* **2,** 10 | Colon |
| 67 PĀNIHṚDAYA, *Śa* **7,** 11 | Palms of the hands |
| 68 PĀRSNYA, *Vi* **8,** 107 | Heel |
| 69 PARVAN, *Su* **26,** 8 | Joints |
| 70 PINḌIKA, *Śa* **7,** 11 (*Pesi—Śa,* **7,** 14) —400 in number | Muscles |
| 71 PLĪHĀ, *Su* **17,** 93 | Spleen |
| 72 PRAPĀNI, *Vi* **8,** 117 | Forearm |
| 73 PRAVĀHA, *Vi* **8,** 117 | Upper arm |
| 74 PṚṢṬHA, *Vi* **8,** 117 | Back |
| 75 PURĪSĀDHĀRA, *Śa* **7,** 10 | Pelvic colon |
| 76 RASĀYANYA, *Vi* **5,** 8 | Capillaries |
| 77 SAKTHI, *Su* **20,** 8 | Thigh-bone |
| 78 SAMVṚTĀSAMVṚTA, *Vi* **5,** 8 | Body channel closed at one end |
| 79 SANDHI, *Śa* **7,** 14 (200 in number) | Joint |
| 80 ŚANKHYA, *Vi* **8,** 105 | Temples |
| 81. ŚARĪRACCHIDRA, *Vi* **5,** 8 | Body orifice |
| 82 ŚEFA, *Vi* **8,** 117 | Penis |
| 83 ŚIRAS, *Su* **17,** 3 | Head |
| 84 SIRĀ, *Vi* **5,** 9 (700 in number) | Vein |
| 85 ŚLEṢMABHAVA *Śa* **7,** 11 | Lungs |
| 86 SKANDHA, *Su* **27,** 334 | Shoulder |
| 87 SNĀYU, *Su* **11,** 48 (900 in number) | Tendon, nerve |
| 88 SPHIK, *Su,* **21,** 15 | Hip |
| 89 ŚRONI, *Sū* **27,** 275 | Pelvis |
| 90 STANA, *Vi* **8,** 117 | Breast |

## TABLE II-A
*Anatomical Terms—General (contd.)*

| Name and reference | Modern name |
|---|---|
| 91 STANAMAṆḌALA Śā 4, 16 | Areola |
| 92 STHŪLĀNTRA Śā 7, 10 | Large intestines |
| 93 ŚUKRĀŚAYA Śā 2, 19 | Seminal vessel |
| 94 SVĀNI, Śā 7, 42 | Bodily orifice |
| 95 SVEDAMUKHA, Śā 7, 42 | Openings of sweat glands |
| 96 TĀLU Śā 7, 11 | Palate |
| 97 TAMAKA Ci 17, 62 | Bronchial tract |
| 98 TṚKA Ci 8, 117 | Sacrum |
| 99 UDAGDHARA Śā 7, 4 | Epidermis |
| 100 UKHA Śā 7, 11 | Axilla |
| 101 UPAJIHVIKĀ Śā 7, 11 | Uvula |
| 102 ŪRU, Sū 16, 8 | Thigh |
| 103 UTSEDHA Ci 8, 117 | Neck |
| 104 UTTARAGUDA Śā 7, 10 | Upper part of the rectal passage |
| 105 VAṄKṢAṆA Śā 14, 10 | Groin |
| 106 VAPĀVAHANA, Śā 7, 10 | Omentum |
| 107 VṚKKA Sū 17, 93 | Kidney |
| 108 VṚṢAṆA Sū 14, 10 | Testicles |
| 109 YAKṚT Sū 17, 93 | Liver |

## TABLE 11-B

### *Bones in the Human Body*

In the *Caraka Samhita* the total number of *asthi* (a general term used by Caraka for bones teeth, nails, hard cartilages and bone sockets) in the human body is said to be 360 which include (*Śa* 7, 6)

| | Name | Number | Modern equivalent |
|---|---|---|---|
| 1 | AKṢAKA | 2 | Collar bones |
| 2 | AMSA | 2 | Cannot be identified with any modern description |
| 3 | AMSA PHALAKA | 2 | *Scapula or shoulder blades* |
| 4 | ARATNI | 4 | Radius and ulna of the forearm |
| 5 | BĀHUNALAKA | 2 | Bones of the upper arms |
| 6 | BHAGĀSTHI | 1 | Pubic bone or the sacrum-cum-coccyx |
| 7 | DANTA | 32 | Teeth |
| 8 | DANTOLŪKHALA | 32 | Sockets of the teeth |
| 9 | GRĪVĀSTHI | 15 | Bones in the column of neck |
| 10 | GULPHA | 4 | Ankle bones or malleoli |
| 11 | HANVASTHI | 1 | Lower jaw bone |
| 12 | HANUMŪLABANDHANA | 2 | Attachment or binding bones of the lower jaw |
| 13 | HASTA MANIKA | 2 | Bones of the wrists |
| 14 | JAṄGHĀ | 4 | Tibia and fibula of the legs |
| 15 | JĀNU | 2 | Knee caps |
| 16 | JATRU | 1 | Cartilage of the wind pipe |
| 17 | KAPĀLAKA | 2 | *Elbow-pans* |
| 18 | NAKHA | 20 | Nails |
| 19 | NĀSIKĀ-GANḌA KŪTA LALĀṬA | 1 | Two nasal two molar and two superciliary ridges of the eye-brows |
| 20 | PĀNIPĀDĀṄGULYASTHI | 60 | Digital bones or phalanges of the toes and fingers (56 only) |
| 21 | PĀNIPĀDAŚALĀKĀ | 20 | Metacarpal and metatarsal bones |
| 22 | PĀNIPĀDAŚALĀKĀDHIṢṬHĀNA | 4 | Bases of the metacarpal and metatarsal bones |
| 23 | PĀRṢṆYASTHI | 2 | Heel bones |
| 24 | PARŚUKĀ | 24 | Ribs |
| 25 | PṚṢṬHAGATĀSTHI | 45 | Backbone or the vertebral column |
| 26 | ŚANKHYA | 2 | Temple-bones |
| 27 | ŚIRAḤKAPĀLA | 4 | Cranial bones |

## Table 11-B
*Bones in the Human Body (contd.)*

| Name | Number | Modern equivalent |
|---|---|---|
| 28 ŚRONIPHALAKA | 2 | Pelvic bones (*or innominatum*) |
| 29 STHĀLAKA | 24 | Sockets of the ribs |
| 30 STHĀLAKĀRBUDA | 24 | Tubercles of the ribs |
| 31 TĀLUKA | 2 | Hard palate |
| 32 URASĀSTHI | 14 | Breast bones |
| 33 ŪRUNALAKA | 2 | Thigh bones |

The total number of bones in the human body as given in modern anatomy is 206 only

## TABLE 12
*Physiological Terms*

| | Name and reference | Modern name |
|---|---|---|
| 1 | ĀMAGARBHA, *Su* **6**, 10 | Embryo (egg) |
| 2 | ANTRAPĀKA, *Ci* **15**, 38 | Digestive process |
| 3 | ANURASA, *Su*, **26**, 28 | Latent taste |
| 4 | APARĀ, *Śa* **6**, 23 | Placenta |
| 5 | APICCHADA, *Su* **28**, 4 | Serum |
| 6 | ĀRTAVA, *Śa* **3**, 3 | Ovum |
| 7 | AŚRU, *Ci* **26**, 23 | Lachrymal fluid |
| 8 | BĪJAGRAHANA, *Śa* **2**, 23 | Fertilization of the ovum |
| 9 | DHĀTU, *Su* **7**, 49 | Major constituents of the human body |
| 10 | DṚṢṬI, *Sū* **8**, 8 | Vision |
| 11 | GARBHA, *Su* **7** 39 | Conception |
| 12 | GHRĀṆA, *Su* **8**, 8 | Sense of smell |
| 13 | HṚDAYASPANDANA, *Ci* **16**, 12 | Heart beat |
| 14 | KAPHA, *Su* **16**, 9 | Phlegm or secretion of mucus |
| 15 | KIṬṬA, *Su*, **28**, 3 | Secretion or bodily waste products |
| 16 | LASI, *Su*, **28**, 8 | Lymphatic fluid |
| 17 | MAJJĀ, *Su* **13**, 17 | Bone-marrow |
| 18 | MALA, *Sū* **7** 42 | Excretions of the body |
| 19 | MASTIṢKA or MASTULAṄGA, *Su* **9**, 81, 90 | Brain-matter |
| 20 | MŪTRA, *Su* **14**, 4 | Urine |
| 21 | NĀBHINĀḌĪ, *Śa* **6**, 23 | Umbilical cord |
| 22 | OJAS, *Su*, **17**, 75 | Vital essence |
| 23 | PARINĀMĀPADYA, *Vi* **5**, 6 | Metabolic process |
| 24 | PITTA, *Su* **3**, 6 | Bile |
| 25 | PRĀṆA, *Vi* **5**, 6 | Life breath |
| 26 | PURĪṢA *Su* **14**, 4 | Faeces |
| 27 | RAJAS, *Su* **25**, 40 | Menstrual flow |
| 28 | RASA, *Su* **17**, 64 | Nutrient body fluid |
| 29 | RAKTA, *Su* **11**, 48 | Blood |
| 30 | RASANĀ, *Su* **8**, 8 | Sense of taste |

TABLE 12
*Physiological Terms (contd.)*

| Name and reference | Modern name |
|---|---|
| 31 RUDHIRASROTAS, *Vi* 5, 6 | Blood flow |
| 32 SAMKOCA, *Sū* 7, 18 | Muscular contraction |
| 33 SPARŚA, *Sū* 8, 8 | Sense of touch |
| 34 SROTAS, *Vi* 5, 8 | Movement of fluids through channels in the human body |
| 35 ŚROTRA, *Sū* 8, 8 | Sense of hearing |
| 37. ŚUKRA, *Vi* 5, 6 | Semen |
| 37 SVEDA, *Vi* 5, 6 | Sweat |
| 38 SVEDĀGAMA, *Sū* 7, 15 | Perspiration |
| 39 UDGĀRA, *Sū* 7, 33 | Eructation |
| 40 UDRANA, *Śā* 4, 16 | Erection |
| 41. UPADEHA, *Ci* 26, 23 | Mucus cells |
| 42 VĪRYA, *Sū* 26, 66 | Potency |

# TABLE 13
## *Diseases*

| | Name and reference | Modern name |
|---|---|---|
| 1 | ADHIJIHVĀ, Ci **12**, 77 | Abscess under the tongue |
| 2 | AGNIMĀNDYA, Śā, **20**, 17 | Dyspepsia |
| 3 | AJĀTODAKA, Ci **13**, 58 | Dehydration of the stomach |
| 4 | AKṢIBHEDA, Su **20**, 1 | Squint eye |
| 5 | AKṢIPĀKA, Su **20**, 14 | Ophthalmitis |
| 6 | AKSIROGA, Ci **26**, 130 (Ninety six varieties mentioned, but neither named nor described) | Eye-affection |
| 7 | ĀLAJI, Ci **12**, 88 | Whitlow |
| 8 | ĀMADOṢA, Vi **2**, 10 | Disorders of chyme formation |
| 9 | AMLAPITTA, Ci **15**, 47 | Acid dyspepsia |
| 10 | ĀNĀHA, Ci **28**, 29 | Acute constipation |
| 11 | ANIDRĀ, Ci **28**, 21 | Insomnia |
| 12 | ANTARĀYĀMA, Ci **28**, 43 | Stiff neck |
| *13* | *ANTRĀPĀNAVIDAHA, Su 24, 14* | *Intestinal inflammation* |
| 14 | ANTRAVRDDHI, Ci **12**, 94 | Hernia |
| 15 | APASMĀRA, Ci **10**, 3 (Five types described according to etiology) | Epilepsy |
| 16 | APATASTRAKA, Si **9**, 12 | Convulsions with body bent like a bow (Tetanus) |
| 17 | ARDHĀVABHEDA, Si **9**, 74 | Hemicrania |
| 18 | ARBUDA, Ci **12**, 87 | Non suppurating swelling |
| 19 | ARDITA, Su **20**, 11 | Facial paralysis |
| 20 | AROCAKA, Ci **26**, 124 (Six types described according to etiology) | Anorexia |
| *21* | *ARŚA, Ci 14, 7 (Seven types described according to etiology)* | Haemorrhoids |
| 22 | AŚMARI, Ci **26**, 36 (Two types according to etiology) | Urinary calculus |
| 23 | ASTHIKSAYA, Su **17**, 67 | Atrophy of bones |
| 24 | ĀSYAVIPĀKA, Su *20, 14* | *Stomatitis* |
| 25 | ATAKTYĀBHINIVEŚA, Ci **10**, 52 | Psychic epilepsy |
| 26 | ATISĀRA, Ci **19**, 4 | Dysentery |
| | (a) ĀMĀTISĀRA, Ci **19**, 5 | Dysentery with mucus discharge |

## TABLE 13
*Diseases (contd)*

| Name and reference | Modern name |
|---|---|
| (*b*) RAKTĀTISĀRA, *Ci* 19, 70 | Dysentery with blood discharge |
| (Six other types described according to etiology) | |
| 27 ATISTHŪLA, *Su* 21, 4 | Excessive obesity |
| 28 BHAGANDARA, *Ci* 12, 96 | Anal fistula |
| 29 CYŪTASANDHI, *Ci* 25, 68 | Dislocation |
| 30 DANTABHEDA, *Su* 20, 11 | Dental schism |
| 31 DANTAMĀMSA VIDRADHI, *Ci* 12, 78 | Gum boil |
| 32 DANTAŚAITHILYA, *Su* 20, 11 | Loose teeth |
| 33 DHAMANĪPRATICAYA, *Su* 20, 17 | Dilatation of blood vessels |
| 34 DHANUṢTAMBHA, *Su* 20, 14 | Tetanus |
| 35 DURMA, *Su* 17, 73 | Neurasthenia |
| 36 EKĀNGAROGA *Su* 20, 11 | Monoplegia |
| 37 GALAGAṆḌA, *Ci* 12, 79 | Tumour on the side of the neck |
| 38 GALAGRAHA, *Su* 18, 22 | Acute swelling inside throat |
| 39 GALAPĀKA, *Su* 20, 14 | Suppurated inflammation in the throat |
| 40 GALAŚUṆḌIKĀ, *Su* 18, 20 | Tonsilitis |
| 41 GARBHIṆĪROGA *Sa* 8, 26 | Diseases of pregnancy |
| 42 GRAHAṆĪDOṢA *Ci* 15, 51<br>(Four types described according to etiology) | Diarrhoea |
| 43 GRANTHI, *Ci* 12, 81 | Glandular swelling, varicocele |
| 44 GṚDHRASĪ, *Su* 20, 11 | Sciatica |
| 45 GUDABHRAMŚA, *Su* 20, 11 | Prolapsed anus |
| 46. GUDAPĀKA, *Su* 20, 14 | Proctitis of the anus |
| 47 GULMA *Ci* 5, 48<br>(Six types described according to etiology) | Hardening and swelling of the spleen |
| 48 HṚDDRAVA, *Su* 20, 11 | Tachycardia |
| 49 HṚDROGA, *Su* 17, 6<br>*(Five types mentioned, but not described)* | Heart disease |
| 50 HṚNMOHA *Su* 20, 11 | Cardiac irregularity or heart-block |
| 51 IKṢUVĀLIKĀRASAMEHA, *Ni* 4, 10 | Glycosuria |
| 52 JALAKAGARDABHA, *Ci* 12, 93 | Fever due to suppuration |
| 53 JĀNUBHEDA *Su* 20, 11 | Bow legs |

# TABLE 13
## Diseases (contd)

| Name and reference | Modern name |
|---|---|
| 54 JĀNUVIŚLEṢA *Su* **20**, 11 | Knock knees |
| 55 JAṬHARĀGNIVIKĀRA *Vi* **6**, 12 (Four types named and described according to *symptoms*) | Morbid appetite |
| 56 JVARA *Ci* chapter 3 (Eight types described according to etiology which includes *sannipata* (typhoid) *Su* **17**, 41) | Fever |
| 57 KAKṢĀ *Su* **20**, 14 | Herpes |
| 58 KAṆḌU, *Ci* **29**, 17 | Pruritus |
| 59 KARNAROGA *Ci* **26**, 127 | Diseases of the ear |
| (*a*) BĀDHIRYA, *Ci* **26**, 128 | Deafness |
| (*b*) KARNAŚOPHA *Ci* **29**, 127 | Inflammatory swelling inside ear |
| (*c*) KARNASRĀVA *Ci* **26**, 127 | Pus discharge from the ear |
| (*d*) *PŪTISRAVANA Ci* **26**, 127 (Also eight other types according to symptoms) | *Suppuration of the inner the ear* |
| 60 KĀSA *Ci* chapter 18 (Five varieties described *according to etiology*) | Chronic cough |
| 61 KEŚABHŪMISPHUṬANAM, *Su* **20**, 11 | Fissures of the scalp |
| 62 KHĀLITVA *Su* **5**, 30 | Baldness |
| 63 KHAÑJATVA *Su* **20**, 11 | Lameness |
| 64 KLAIBYA *Ci* **30**, 154 (Four types described according *to etiology*) | Impotency of the male |
| 65 KOṬA *Sū* **24** 16 | Localized thickening of muscle fibres |
| 66 *KṚMI Su* **19**, 9 (Nineteen types according to nature of the parasites) | *Parasitic infections* |
| 67 KṢĪRA DOṢA *Ci* **30**, 237 (Eleven types *according to etiology* and *symptoms*) | Disorder of lactation |
| 68 KUBJATVA *Su* **20**, 11 | Hunch back condition |
| 69 KUṢṬHA *Ci* chapter 7 | Chronic skin diseases |
| (*a*) ALASAKA *Ci* **7**, 23 | Itching red papules |
| (*b*) CARMADALA *Ci* **7**, 24 | Easily bursting itching eruptions |
| (*c*) CARMAKUṢṬHA *Ci* **7**, 21 | Extensive eczema with thickened dermis |
| (*d*) EKAKUṢṬHA *Ci* **7**, 21 | Localized eczema |
| (*e*) DADRU, *Ci* **7**, *23* | Ringworm |

## TABLE 13
*Diseases (contd)*

| Name and reference | Modern name |
|---|---|
| (*f*) KĀKAṆA, *Ci* 7, 20 | Malignant growths |
| (*g*) KAPĀLA, *Ci* 7, 14 | Erythema |
| (*h*) KILĀSA, *Ci* 7, 173 | Fresh leprous lesions |
| (*i*) KIṬIMA, *Ci* 7, 22 | Hard, rough and discoloured dermatosis |
| (*j*) MAṆḌALA, *Ci* 7, 16 | Urticarial dermatosis |
| (*k*) PĀMĀ, *Ci* 7, 25 | Mild leprosy |
| (*l*) PUṆḌARĪKA, *Ci* 7, 18 | Ulcerated dermatosis |
| (*m*) ṚṢYAJIHVAKA, *Ci* 7, 18 | Suppurated dermatosis |
| (*n*) ŚATARU, *Ci* 7, 26 | Leprous sores gangrene |
| (*o*) SIDHMA, *Ci* 7, 19 | Psoriasis |
| (*p*) ŚVITRA, *Ci* 7, 173 | Patchy dermatosis |
| (*q*) UDUMBARA, *Ci* 7, 15 | Acute, non-healing sores |
| (*r*) VICARCIKĀ, *Ci* 7, 26 | Scabies |
| (*s*) VIPĀDIKĀ, *Ci* 7, 22 | Dermatosis with fissures in the extremeties |
| (*t*) VISPHOṬAKA, *Ci* 7, 25 | Boils |
| 70 LALĀṬABHEDA, *Si* 20, 11 | Frontal headache |
| 71 LIṄGAPĀKA, *Ci* 30, 168 | Suppuration and sores of the penis |
| 72 MADĀTYAYA *Ci* chapter 24 (Six types described according to symptoms) | Chronic alcoholism |
| 73 MADHUMEHA, *Si* 4, 43, *Ci* 6, 55-56 | Diabetes (described as incurable) |
| 74 MAMSAKLEDA, *Sa* 20, 14 | Softening and degeneration of muscular tissues |
| 75 MANOVIKĀRA, *Si* 7, 52 | Psychic disorders |
| 76 MASŪRIKĀ, *Ci* 12, 93 | Pox |
| 77 MEḌHRAPĀKA, *Si* 20, 14 | Urethritis |
| 78 MṚTAGARBHA, *Si* 8, 30 | Chronic abortion |
| 79 MŪKATVA *Si* 20, 11 | Dumbness |
| 80 MUKHAROGA *Ci* 26, 119 | Oral diseases |
| 81 MŪRCCHĀ *Si* 24, 35 (Five types described according to etiology) | Fainting fits |
| 82 MŪTRAJAṬHARA, *Si* 9, 30 | Retention of urine causing distension of the lower abdomen |

# TABLE 13
## *Diseases (contd)*

| Name and reference | Modern name |
|---|---|
| 83 MŪTRAKṚCCHRA Ci 26, 32 (Eight types described according to etiology) | Dysuria |
| 84 MŪTRAKSAYA Si 9, 34 | Uraemia |
| 85 MŪTRĀTĪTA Si 9, 35 | Chronic difficulty and delay in micturition |
| 86 MŪTROTSAṄGA Si 9, 34 | Blood discharge with urine |
| 87 NĀḌĪVRANA Ci 25, 56 | Sinus of fistula |
| *88 NĀḌĪROGA Śa 8, 45* (Four types named but not described) | *Diseases of new born babies* |
| 89 NĀSĀROGA Ci chapetr 26 | Diseases of the nasal passage |
| (a) DUSṬAPRATIŚAYA Ci 26, 110 | Pernicious rhinitis |
| (b) GHRĀNAPĀKA Ci 26, 115 | Anosmia |
| (c) NĀSĀRŚAS, Ci 14, 6 | Polypus in nose |
| (d) NĀSĀRBUDA Ci 26, 116 | Tumour in nose |
| (e) NĀSĀSRĀVA Ci 26, 112 | Catarrh |
| *(f) NĀSĀŚṚṄGĀṬAKA Ci 26, 111* | *Atrophy of the sense of smell* |
| (g) PINĀSA Ci 26, 114 | Acute rhinitis |
| (h) PRATINĀHA Ci 26, 112 | Obstruction in the nasal passage |
| (i) PŪYARAKTA Ci 26, 116 (Also eleven other minor variations) | Suppuration inside nose |
| 90 NIDRĀDHIKYA Su 20, 17 | Hypersomnia |
| *91 OSA Su 20, 14* | Heat-stroke |
| 92 OSṬHABHEDA Su 20, 11 | Hare-lips |
| 93 PĀDABHRAMŚA Sū 20, 11 | Fallen arch or flat foot |
| 94 PAKṢAVADHA Su 20, 11 | Hemiplagia |
| 95 PĀNDUROGA Ci 16 7 | Jaundice |
| (a) HALĪMAKA Ci 16, 132 | Jaundice due to anaemia |
| *(b) KĀMALĀ Ci 16, 34* (Three types described according to etiology) | Jaundice due to intestinal disorders |
| (c) KUMBHAKĀMALĀ Ci 26, 36 | Malignant jaundice |
| 96 PĀṄGULYA Su 20, 11 | Deformed foot club-foot |
| 97 PĀRŚVAVIMARDA Su 20, 11 | Painful spasms in chest with breathing difficulty |

## TABLE 13
*Diseases (contd)*

| | Name and reference | Modern name |
|---|---|---|
| 98 | PĪDAKA, *Su* **17,** 82 | Diabetic eruptions |
| | (*a*) ALAJĪ, *Ci* **17,** 88 | Dry gangrene |
| | (*b*) JĀLINĪ, *Ci* **17,** 86 | Carbuncle with multiple openings |
| | (*c*) KACCHAPIKĀ, *Su* **17,** 85 | Carbuncle with single opening |
| | (*d*) ŚĀRIVAKA, *Su* **17,** 84 | *Circular ulcers* |
| | (*e*) SARSAPĪ, *Su* **17,** 87 | Large boil, surrounded by small secondary pustules |
| | (*f*) VIDRADHI, *Su* **17,** 10 | Abscesses of the inner orgnas |
| | (*g*) VINATĀ, *Su* **17,** 89 | Moist gangrene |
| 99 | PLĪHĀROGA, *Su* **19,** 4 (FIve types described according to etiology) | Splenic diseases |
| 100 | PRAMEHA, *Ni* **4,** 8 (Twenty variations including diabetes, described *according to symptoms*) | Urinary disorders |
| 101 | PŪTIGHRĀNATĀ, *Sā* **14,** 11 | Halitosis |
| 102 | RĀJAYAKṢMĀ, *Ci* **8,** 14 | Pulmonary consumption |
| 103 | RAKTAGRANTHI, *Si* **9,** 41 | Tumour in the neck of the bladder |
| 104 | RAKTAPITTA, *Ci* **4,** 11 (Seven types described according to etiology) | Haemothermia |
| 105 | RETODOṢA, *Ci* **30,** 139 (Eight types described according to symptoms) | Seminal disorders |
| 106 | ROHINĪ, *Su* **18,** 34 | Extensive and painful swelling at the base of the tongue |
| 107 | ROMĀNTIKĀ, *Ci* **12,** 92 | Small eruptions spread over the entire skin surface |
| 108 | ŚĀLUKA, *Ci* **12,** 75 | Frightful swelling and inflammation inside throat with stertorus breathing |
| 109 | ŚANKHYABHEDA, *Sā* **20,** 11 | Migraine |
| 110 | SARVĀṄGAROGA, *Ci* **28,** 29 | General paralysis |
| 111 | ŚIROROGA *Su* **17,** 6 (Five types metioned, but not described) | Diseases of the head |
| 112 | ŚIRAHŚOPHA, *Ci* **12,** 75 | Erysipelas of the head |
| 113 | SIRĀSTAMBHA *Ci* **25,** 29 | Vascular thrombosis |
| 114 | ŚLĪPADA *Ci* **12,** 98 | Elephantiasis of the leg |
| 115 | ŚOṆITAKLEDA, *Sā* **20,** 14 | Pernicious anaemia |

# TABLE 13
## *Diseases (contd)*

| Name and reference | Modern name |
|---|---|
| 116 ŚOSA, *Ni* **6,** 11 | Wasting diseases |
| 117 ŚOTHA, *Ci* **12,** 1 | Oedema |
| 118 SROTOROGA *Vi* **5,** 8 (Fourteen types named and described according to location) | Diseases of the body fluids and channel |
| 119 SŪRYĀVARTA *Si* **9,** 79 | Recurrent neuralgic pain in the had |
| 120 SVARAKSAYA *Su* **24,** 15 | Aphonia |
| 121 ŚVĀSA *Ci* **17,** 46 (Five types described according to symptoms) | Asthma |
| 122 ŚVETAMŪTRAVARCASTVA, *Su* **20,** 17 | White and flocculent urine |
| 123 TĀLUVIDRADHI, *Ci* **12,** 77 | Abscess of the palate |
| 124 TAMASU, *Su* **20,** 11 | Asthenia |
| 125 TAMO TIDARŚANA *Su* **24,** 15 | Repeated fainting fits |
| 126 TIMIRA, *Su* **20,** 11 | Partial loss of vision |
| 127 TṚṢṆĀ, *Ci* **22,** 57 *(Five types described according to etiology)* | Morbid thirst |
| 128 TVAGAVADĀRANA, *Su* **20,** 14 | Scaly skin |
| 129 UDARAROGA *Ci* **13,** 9 | Stomach troubles |
| (*a*) CHIDRODARA *Ci* **13,** 42 | Perforation of the stomach or intestinal wall |
| (*b*) JALODARA, *Ci* **13,** 45 | Distension of the abdomen due to fluid secretion |
| (*c*) UDARĀVESṬA *Su* **20,** 11 | Cardiac pain originating in stomach |
| (*d*) UDĀVARTA *Ci* **26,** 6 | Paralysis of the intestines |
| (*e*) BADDHAGUDODARA *Ci* **13,** 39 | Peritonitis |
| 130 UDARDA, *Su* **20,** 17 | Urticaria |
| 131 UNAPADĀNKUŚANĪYAKAVIKĀRA *Vi* **3,** 4 | Epidemic diseases |
| 132 UNMĀDA *Ci* chapter 9 (Fifteen types described five according to etiology and the others according to symptoms) | Insanity |
| 133 UPAJIHVIKĀ *Ci* **12,** 77 | Acute glossitis |
| 134 UPAKUŚA *Ci* **12,** 78 | Gingivitis |
| 135 ŪRUSĀDA, *Su* **20,** 11 | Atrophy of the thigh muscles |
| 136 ŪRUSTAMBHA, *Ci* chapter 27 | Paralysis of the thighs |

## TABLE 13
*Diseases (contd)*

| Name and reference | Modern name |
|---|---|
| 137. UTSANTRA, *Ci* 25, 58 | Displacement of internal organs |
| 138 VĀTABALĀSA, *Ci* 29, 11 (Three types named) | Rheumatism of the joints |
| 139 VĀTAṢṬILĀ, *Si* 9, 36 | Hard tumour in the rectal or urinary passage |
| 140 VIḌĀLIKĀ, *Ci* 12, 76 | Angina or quinsy |
| 141 VIDARIKĀ, *Ci* 12, 89 | Bubo in the groins |
| 142 VILOMA, *Ci* 25, 118 | Alopecia |
| 143 VISAMAJVARA, *Ci* 3, 53 (Six types described according to periodicity) | Recurrent fevers |
| 144 VISARPA, *Ci* 21, 29 (Seven types described according to etiology) | Acute spreading suppurations |
| 145 VISŪCIKĀ, *Vi* 2, 10 | Choleraic diarrhoea |
| 146 VRADHNA, *Ci* 12, 94 (Five types described according to etiology) | Permanent swellings |
| 147 VRANA *Ci* chapter 25 (Forty-four types mentioned, but not all described, including *nadivrana*) | Wounds, sores |
| 148 VRSANAKSEPA, *Su* 20, 11 | Crypto-orchitis |
| 149 *YONI-ROGA, *Ci* chapter 30 | Diseases of the reproductive organs |
| (a) ACARAṆĀ, *Ci* 30, 18 | Itching growth in the vagina |
| (b) ANTARMUKHĪ, *Ci* 30, 29 | Inverted uterus |
| (c) ARAJASKA, *Ci* 30, 17 | Scanty menstrual flow or amenorrhoea |
| (d) ATICARANĀ *Ci* 30, 19 | Chronic vaginitis |
| (e) KARṆINI, *Ci* 30, 27 | Inflammation of the cervix |
| (f) MAHĀYONI, *Ci* 30, 35 | Prolapsed uterus |
| (g) PARIPLUTA, *Ci* 30, 23 | Acute vaginitis |
| (h) PRADARA, *Ci* 30, 203 (Four types described according to etiology and symptoms) | Menstrual disorders |
| (i) PRĀKCARAṆĀ, *Ci* 30, 20 | Deflorative vaginitis |
| (j) PUTRAGHNI, *Ci* 30, 28 | Chronic abortion |
| (k) RAKTAYONI, *Ci* 30, 16 | Menorrhagia |

* This term in *Caraka* also includes seminal disorders and impotency in the male, as also diseases of lactation. But these have been mentioned in the present list in their proper order

TABLE 13
*Diseases (contd)*

| Name and reference | Modern name |
|---|---|
| (*l*) UDĀVARTINĪ *G* 30 25 | Dysmenorrhoea |
| (*m*) UPAPLUTĀ *C* 30 21 | Leucorrhoea |
| (*n*) VĀMINĪ *C* 30 32 | Flow of old deposited semen |

## TABLE 14
### *Pathological Conditions and Congenital Defects*

| | Name and reference | Modern name |
|---|---|---|
| 1 | ABHIGHĀTA, *Śi* 9, 6 (*Three types mentioned*) | Accidental injuries |
| 2 | AJĪRNA, *Ci* 15, 42 | Indigestion |
| 3 | AKṢIŚŪLA, *Su* 20, 11 | Eye-ache |
| 4 | ĀLĀLAMEHA, *Ni* 4, 10 | Discharge of pus with urine |
| 5 | ĀLASYA, *Su* 20, 17 | Lassitude |
| 6 | ĀMAPITTA, *Ci* 22, 15 | Biliousness |
| 7 | AMLAKA, *Su* 20, 14 | Hyperacidity of stomach |
| 8 | AMSADĀHA, *Sū* 20, 14 | Local burning sensation |
| 9 | AṄGAGANDHA, *Su* 20, 14 | Body odour |
| 10 | AṄGĀVADĀRANA, *Su* 20, 14 | Local fissures on the surface of the body |
| 11 | ANTARDĀHA, *Su* 20, 14 | Burning sensation |
| 12 | APATANAKA, *Si* 9, 15 | Fainting and groaning |
| 13 | ARUCI, *Ci* 8, 60 | Distaste for food |
| 14 | ASTHIBHAṄGA, *Ci* 25, 68 | Fractures |
| 15 | ATIDAURBALYA, *Sū* 24, 13 | *Prostration* |
| 16 | ATIKṚŚA, *Sū* 20, 10 | Extreme emaciation |
| 17 | ATISVEDA, *Su* 20, 14 | Excessive sweating |
| 18 | ATṚPTI, *Su* 20, 14 | Morbid hunger |
| 19 | CHARDI, *Ci* 20, 4 (Five different types described according to etiology) | Nausea, vomiting |
| 20 | CHINNAŚVĀSA, *Ci* 17, 54 | Interrupted breathing |
| 21 | DAVATHU, *Sū* 20, 14 | Acid eructation |
| 22 | DĀHA, *Sū* 20, 14 | Burn |
| 23 | DANDAKA, *Sū* 20, 11 | Convulsion |
| 24 | DHŪMODGĀRA, *Sū* 20, 14 | *Gaseous eructation* |
| 25 | DURMANAS, *Sū* 17, 73 | Neurasthenia |
| 26 | DUṢṬA, *Ci* 25, 29 | Suppurated condition |
| 27 | DVIRETAS, *Śā* 2, 17 | Hermaphrodite condition |
| 28 | GAṆḌAMĀLĀ, *Ci* 12, 79 | Chain of tumours around the neck |

TABLE 14
*Pathological Conditions and Congenital Defects (contd)*

| Name and reference | Modern name |
|---|---|
| 29 GRĪVĀSTAMBHA, *Su* 20, 11 | Rigidity of the neck muscles |
| 30 GUDĀRTISYA, *Sū* 20, 11 | Rectal proctalgia |
| 31 GULPHAGRAHA, *Su* 20, 11 | Sprained ankle |
| 32 HANUBHEDA, *Su* 20, 11 | Dislocated jaws |
| 33 HARITATVA, *Su* 20, 14 | Sallow skin |
| 34 HIKKĀ, *Ci* 17, 21 (Five types described according to symptoms) | Hiccup |
| 35 HRDAYOPALEPA *Su* 20, 17 | Excessive secretion of phlegm |
| 36 JĪVADĀNA, *Su* 20, 14 | Haemorrhage |
| 37 JVARA, *Ci* chapter 3 (Eight types described according to etiology) | Rise of body temperature |
| 38 KAMPA, *Su* 24, 15 | Tremor |
| 39 KANTHALEPA, *Su* 20, 17 | Excessive secretion of mucus in throat |
| 40 KARNAKANDU, *Ci* 26, 128 | Itching inside ears |
| 41 KARNANĀDA, *Ci* 26, 128 | Buzzing sound inside ears |
| 42 KARṆAŚŪLA, *Ci* 26, 127 | Ear-ache |
| 43 KARNAVIDĀHA *Ci* 26, 128 | Burning sensation inside ears |
| 44 KAṢĀYĀSYATĀ, *Su* 20, 11 | Astringent taste in the mouth |
| 45 KHALLI, *Ci* 28, 57 | Neuralgic pain in the lower limbs and shoulders |
| 46 KHAÑJATVA, *Sū* 20, 11 | Lameness |
| 47 KIKKISA, *Śa* 8, 32 | Burning sensation of the vulva and cracking of local skin |
| 48 LAVANĀSYATĀ, *Su* 24, 14 | Saline taste in the mouth |
| 49 LOHITA GANDHĀSYATĀ, *Su* 20, 14 | Metallic taste in the mouth |
| 50 MADA, *Su* 24, 27 (Seven types described according to symptoms or intoxicating agents) | Intoxication |
| 51 MALĀDHIKYA, *Su* 20, 17 | Excessive secretion of faecal matter |
| 52 MĀMSADĀHA, *Su* 20, 14 | Burning sensation in the muscles |
| 53 MUKHAMĀDHURYA, *Sū* 20, 17 | Persistent sweet taste in the mouth |
| 54 MUKHAŚOṢA, *Su* 20, 11 | Dryness of the palate and tongue |
| 55 MUKHASRĀVA, *Su* 20, 17 | Excessive salivation |

## Table 14

*Pathological Conditions and Congenital Defects (contd.)*

| Name and reference | Modern name |
|---|---|
| 56 MŪTRAUKASĀDA, Ci 9, 28 | Dense, turbid and coloured urine |
| 57. PĀDAŚŪLA, Sū 20, 11 | Pain in the foot |
| 58 PĀDASUPTATĀ, Sū 20, 11 | Muscular cramps in the leg |
| 59 PICCHANA, Śā 17, 4 | Contusion |
| 60 PLOṢA, Sū 20, 14 | Scorching of the skin |
| 61. PRAMĪLAKA, Sū 24, 12 | Torpor of the body |
| 62 PṚṢṬHAGRAHA, Sū 20, 11 | Stiffness of the back |
| 63 PŪTIMUKHATĀ, Sū 20, 14 | Foetid smell from the mouth |
| 64 PŪTYĀSYATĀ, Sū 24, 11 | Putrid taste in the mouth |
| 65 RAJONĀŚA, Sū 20, 11 | Suppressed menstrual flow |
| 66 ŚANAIRMEHA, Ni 4, 10 | Excessively slow micturition |
| 67 ṢAṆḌHĪ or ṢAṆḌHAYONI, Ci 30, 31 | Gynandroid condition in the female |
| 68 SĀNDRAMEHA, Ni 4, 10 | Viscous urine |
| 69 SĀNDRAPRASĀDAMEHA, Ni 4, 10 | Sedimented urine |
| 70 ŚEPHASTAMBHA, Sū 20, 11 | Priapism |
| 71 SIKATĀMEHA, Ni 4, 10 | Gravel particles in urine |
| 72 ŚIRORUK, Sū 20, 11 | Headache |
| 73 ŚOṢA, Ni 6, 11 | Atrophied condition |
| 74 ŚOTHA, Vi 12, 1 | Oedema |
| 75 SŪCĪMUKHA, Ci 30, 31 | Constriction of the cervix |
| 76. ŚUKRAMEHA, Ni 4, 10 | Passing of semen with urine |
| 77 STAMBHA, Ci 28, 20 | Spastic condition |
| 78 SUPTI, Ci 27, 16 | Cramps or temporary paralysis |
| 79 ŚVAYATHU, Ci 12, 12 (Six types described according to etiology.) | Swellings |
| 80 ŚVETĀBHĀSYATĀ, Sū 20, 17 | Palor of the skin |
| 81 TAMAḤPRAVEŚA, Sū 20, 11 | Total unconsciousness |
| 82 TANDRĀTIYOGA, Sū 24, 1[illegible] | Extreme drowsiness |
| 83 TIKTĀMLODGIRAṆA, Sū 24, 14 | Bitter and acid eructation |
| 84 TIKTĀSYATĀ, Sū 20, 11 | Bitter taste in the mouth |

TABLE 14

*Pathological Conditions and Congenital Defects (contd)*

| Name and reference | Modern name |
|---|---|
| 85 TRIKAGRAHA, *Su* **20,** 11 | Neuralgic pain in sacral region |
| 86 TVAGDĀHA, *Su* **20,** 14 | Burning sensation of skin |
| 87 UDAKAMEHA, *Ni* **4,** 10 | Excessive volume of urine |
| 88 UDVṚTTA, *Ci* **25,** 58 | Swelling |
| 89 UPAVEṢṬAKA, *Śa* **8,** 26 | Displacement of the foetus |
| 90 UṢMĀDHIKYA, *Su* **20,** 14 | Very high temperature |
| 91 VĀGBHAṄGA, *Su* **20,** 11 | Failing speech |
| 92 VĀMANATVA, *Su* **20,** 11 | Dwarfness |
| 93 VARTMASAMKOCA, *Su* **20,** 11 | Retracted eyelids |
| 94 VARTMASTAMBHA, *Su* **20,** 11 | Rigidity of eyelids |
| 95 VĀTABASTI, *Si* **9,** 37 | Painful retention of urine |
| 96 VĀTIKAṢAṆḌHA, *Śa.* **2,** 21 | Eunuch condition in males |
| 97 VEPATHU, *Su* **20,** 11 | Shivering |
| 98 VIDĀHA, *Sū* **10,** 95 | Suppurated swelling |
| 99 VIJYUTA, *Ci* **25,** 70 | Dislocation |
| 100 VIKṢEPA, *Ci* **23,** 33 | Muscular rigor |
| 101 VIṢA, *Ci* chapter 23 | Toxicosis, poisoning |
| (*a*) ĀMAVIṢA *Ci* **15,** 46 | Food poisoning |
| (*b*) GARAVIṢA or DŪṢĪVIṢA *Ci* **23,** 14 | Poisoning from inorganic substances |
| (*c*) JANGAMAVIṢA, *Ci* **23,** 9 | Poisoning due to bites |
| (*d*) STHĀVARAVIṢA *Ci* **23,** 11 | Poisoning due to vegetable roots and bulbs |
| 102 VIVARṆATĀ, *Su* **24,** 13 | Depigmentation of the skin |
| 103 YONIŚOṢA, *Ci* **30,** 33 | Dryness of the vaginal passage |

TABLE 15

*Therapeutical, Surgical, and Chemical Terms (contd.)*

| Name and reference | Modern equivalent |
|---|---|
| 30 VAMANA, *Su* **7,** 15 | Emesis |
| *31 BANDHANA, *Su* **17,** 4 | Ligature |
| *32 BASTIKARMA, *Su* **1,** 86 | Application of enema |
| 33 VENIKA, *Ci* **23,** 38 | Tourniquet |
| 34 VINNĀSANA, *Vi* **6,** 16 | Psychiatric treatment |
| 35 VIRECANA, *Sū* **7,** 15 | Purging |
| 36 VYĀDHANA *Su* **11,** 55 | Surgical puncturing |

**Chemical Terms**

| | |
|---|---|
| 1 AMLA, *Su* **6,** 11 | Acid |
| 2 ATAILA, *Ni* **8,** 150 | Oils other than vegetable oils |
| 3 DHĀTUMALA *Ci* **16,** 74 | Metallic ores or corroded metals |
| 4 KṢĀRA, *Su* **3,** 14 | Alkaline substance |
| 5 LAVANA, *Ci* **10,** 44 | Salt |
| 6 LOHA, *Ci* **25,** 103 | Metal |
| 7 RĀGA, *Ci* **26,** 28 | Dye |
| 8 SNEHA, *Su* **13,** 4 | Oil or fat |
| 9 TAILA, *Ni* **8,** 150 | Vegetable oil |

* Nos 31 and 32 have not been placed in their proper alphabetical order through mistake

## TABLE 17
### *Terms for Physicochemical Processes*

| Name and reference | Modern equivalent |
|---|---|
| 1 ANTARDHŪMA *Ci* 15, 174 | Combustion in closed vessel (internal combustion) |
| 2 AVASIÑCANA *Vi* 7, 25 | Moistening |
| 3 AVISAMPLAVANA. *Śa* 6, 23 | Flushing in a current of liquid |
| 4 BHĀVANA *Vi* 7, 16 | Impregnating with liquid |
| 5 BHṚSTA *Su* 4, 15 | Roasting |
| 6 DĀHANA. *Ci* 15, 17 | Combustion |
| 7 DRAVA *Śa* 8, 41 | Solution |
| 8 GATARASA *Vi* 7, 17 | Evaporated residue |
| 9 JARJARĪKARANA *Ci* 26, 244 | Trituration |
| 10 JUṢA *Ni* 8, 136 | Liquid extract |
| 11 JVALANA *Su* 12, 8/3 | Ignition |
| 12 KALKA *Sū* 4, 7 | Paste |
| 13 KHEṬABHŪTA *Śa* 4, 9 | Coagulated |
| 14 KHINNA *Su* 27, 254 | Boiled |
| 15 LEHA *Vi* 8, 136 | Tincture |
| 16 MANTHANA *Vi* 5, 22 | Churning |
| 17 MRDUPĀKA *Su* 27, 275 | Mild heating |
| 18 NISKĀTHANA *Ci* 15, 174 | Evaporation to dryness |
| 19 PARIPŪYANA *Vi* 7, 26 | Straining solids from solid liquid mixtures |
| 20 PĀTANA *Ci* 26, 59 | Distillation precipitation |
| 21 PHĀNṬA, *Su* 4, 7 | Infusion |
| 22 PHENA *Vi* 7, 23 | Foam or froth |
| 23 PHENAMĀLĀ *Ci* 23, 110 | Effervescence |
| 24 PISṬASVEDANA *Ci* 1/1, 58 | Steaming of solids |
| 25 PRASĀDA *Ci* 4, 80 | Clear supernatant liquid |
| 26 SĀDHANA *Vi* 8, 140 | Boiling |
| 27 SAMYOGA *Ni* 5, 22 | Chemical combination |
| 28 SĀNDRA *Śa* 6, 16 | Viscous |
| 29 ŚAUCA *Vi* 5, 22 | Clarification of turbid liquid |

TABLE 17

*Terms for Physicochemical Processes (contd.)*

| Name and reference | Modern equivalent |
|---|---|
| 30 SIÑCANA *Śā* 8, 19 | Addition of water |
| 31 ŚITĪBHŪTA *Vi* 7, 26 | Cooled |
| 32 ŚOṢAṆA *Vi* 7, 22 | Desiccation |
| 33 SṚTA *Śā* 4, 7 | Macerated with liquid |
| 34 SRUTA *Ci* 15, 172 | Percolated with water |
| 35 SUKṢMACŪRṆA *Vi* 7, 22 | Impalpable powder |
| 36 SUPŪTA *Ci* 1/3, 3 | Filtered liquid |
| 37 TAILAPRAPĪḌANA *Vi* 7, 25 | Extraction of oily matter |
| 38 UDGHṚTYA *Śā* 8, 41 | Suspension of solids in liquids |
| 39 UPAHITA *Vi* 8, 140 | Intimately mixed |
| 40 UPASAMSKARAṆA *Vi* 8, 140 | Filtration |
| 41 UPAŚOṢAṆA *Su* 12, 8/3 | Evaporation |
| 42 UPASVEDANA *Ci* 1/2, 14 | A special process of distillation |
| 43 VIGATASNEHA *Vi* 7, 22 | Extracted from fatty or oily matter |
| 44 VIRŪKṢAṆA *Śā* 5, 4 | Dehydration |

## TABLE 18
### *Mechanical and Physical Terms*

| Name and reference | Modern equivalent |
|---|---|
| 1 ĀKUÑCANA *Śa* 7, 16 | Contraction |
| 2 AVAGĀHANA *Vi* 6, 16 | Immersion |
| 3 AVAGHAṬṬANA *Vi* 7, 17 | Vigorous stirring |
| 4 AVALEPANA *Vi* 7, 23 | Surface coating |
| 5 CUSANA *Ci* 23, 26 | Suction |
| 6 DHĀRANA *Śa* 7, 16 | Retention |
| 7 EKĀVARTA *Ci* 23, 109 | Spiral |
| 8 GAMANA *Śa* 7, 16 | Motion |
| 9 GRAHANA *Ni* 5, 22 | Measurement |
| 10 KṢODANA *Vi* 7, 22 | Pulverization |
| 11 MĀRGA *Su* 6, 4 | Trajectory or orbit |
| 12 PARICCHĀYĀ *In* 7, 9 | *Penumbra*, aura |
| 13 PARINĀHA *Si* 3, 7 | Circumference |
| 14 PARYANTA *Vi* 8, 117 | Distance between extreme points |
| 15 PRAPĪḌANA *Vi* 7, 25 | Rubbing |
| 16 PRASĀRANA *Śa* 7, 16 | Expansion |
| 17 PRASTARANA *Vi* 7, 22 | Spreading in layer |
| 18 PRERANA *Śa* 7, 16 | Impulse |
| 19 SANTĀNAGATI *Su* 12, 8/3 | Continuous motion |
| 20 SUṢIRA *Sū* 12, 7 | Porous |
| 21 TATTVA *Śa* 1, 55 | *Reflected image* |
| 22 TRIDAṆḌA *Su* 1, 46 | Tripod |
| 23 UNMARDANA *Ni* 6, 16 | Abrasion |
| 24 UPĀÑGA *Su* 5, 86 | Lubrication |
| 25 VYĀMA *Su* 14, 43 | *Unit of length* |

# TABLE 19

## *Weights and Measures*

(*Ka* 12, 87-97)

The smallest unit of weight is that of a *Dhamsi* (minute particle)

| | |
|---|---|
| 6 DHAMSIS | 1 MARICI |
| 6 MARICIS | 1 SARSAPA (Mustard seed) |
| 8 SARṢAPAS | 1 TANḌULA |
| 2 TANḌULAS | 1 DHĀNYAMAṢA |
| 2 DHĀNYAMĀSAS | 1 YAVA |
| 4 DHĀNYAMĀṢAS | 1 ANḌIKA |
| 4 ANDIKAS | 1 MĀŚAKA or DHĀNYAKA |
| 3 MĀṢAKAS | 1 ŚANA |
| 2 ŚAṆAS | 1 DANKSANA or KOLĀ or VADARA |
| 2 DAÑKṢAṆAS | 1 KARSA or SVARNA or AKSA or PICŪ or VIḌĀLAPĀDAKA or PĀNITALA or TINḌUKA or KAVALAGRAHA |
| 2 KARSAS | 1 ŚUKTI or AṢṬAMIKA |
| 4 KARSAS | 1 PALA or MUṢṬI or PRĀKUÑCANA or CATURTHIKĀ or ṢOḌAŚIKA or ĀMRA |
| 2 PALAS | 1 PRASRTA or AṢṬAMANA |
| 4 PALAS | 1 AÑJALI or KUḌAVA |
| 4 KUḌAVAS | 1 PRASTHA |
| 4 PRASTHAS | 1 ĀḌAKA or PATRA |
| 8 PRASTHAS | 1 KĀMSA |
| 4 KĀMSAS | 1 DRONA or CARMANA or NALVANA or KALASA or GHATA or UNMANA |
| 2 DRONAS | 1 ŚURPA or KUMBHA |
| 2 ŚURPAS | 1 GONI or KHĀRI or BHĀRA |
| 32 ŚURPAS | 1 VĀHA |
| Also 100 PALAS | 1 TULĀ |

Later commentators have equated the *Karṣa* to 2 modern *Tolas* This makes the *Tula* equal to 9 33 kilograms

TABLE 20

*Terms for Physical Properties*

*(Su. 25, 36, 26, 11)*

| Name | Modern equivalent |
|---|---|
| 1 DRAVA | Liquid, melt |
| 2 GURU | Heavy |
| 3 KAṬHINA | Hard, solid |
| 4 KHARA | Rough |
| 5 LAGHU | Light |
| 6 MANDA | Mild, weak |
| 7 MṚDU | Soft |
| 8 PICCHILA | Slippery |
| 9 RŪKṢA | Dry |
| 10 SĀNDRA | Viscid |
| 11 SARA | Mobile, fluid |
| 12 ŚĪTA | Cold |
| 13 ŚLAKṢṆA | Smooth, polished |
| 14 SNIGDHA | Oily |
| 15 STHIRA | Firm |
| 16 STHŪLA | Stout |
| 17 SŪKṢMA | Fine |
| 18 TĪKṢṆA | Sharp |
| 19 UṢṆA | Hot |
| 20 VIŚADA | Scattering |

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# ERRATA

| | | | | | | |
|---|---|---|---|---|---|---|
| Page vi, | line 27 | from the top, | *for* Siences, | | *read* | Sciences |
| ,, 2, | ,, 19 | ,, ,, ,, | ,, | slokas | ,, | *slokas* |
| ,, 27, | ,, 5 | ,, ,, ,, | | *Jivaniya* | ,, | *Jivaniya* |
| ,, 30, | ,, 4 | ,, ,, ,, | | PRASAH-VARGA | ,, | PRASAHA VARGA |
| ,, 52, | ,, 17 | ,, ,, ,, | (column 4) *for* | ringworms | ,, | ringworm, |
| ,, 88, | ,, 16 | ,, ,, ,, | (column 2) ,, | souredmilk | ,, | soured milk |